

AD-A123 331

193088 MLRS MISSILE NUMBERS BC-107 BC-109 BC-112 ROUND
NUMBERS V-372/PA-9. (U) ARMY ELECTRONICS RESEARCH AND
DEVELOPMENT COMMAND WSMR NM ATM. D C KELLER NOV 82
ERADCON/ASL-DR-1276 F/G 4/2

1/1

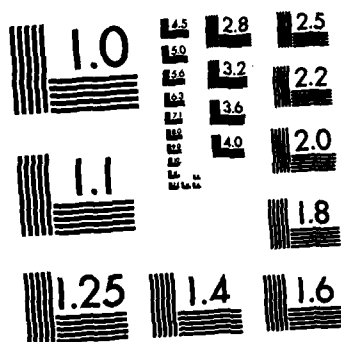
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MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

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SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER DR 1276	2. GOVT ACCESSION NO. AD-A123331	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) 19308B MLRS Missile Numbers BC-107, BC-109, BC-112 Round Numbers V-372/PQ-97, V-373/PQ-98, V-374/PQ-99		5. TYPE OF REPORT & PERIOD COVERED
		6. PERFORMING ORG. REPORT NUMBER
7. AUTHOR(s) White Sands Meteorological Team		8. CONTRACT OR GRANT NUMBER(s) DA Task 1F665702D127-02
9. PERFORMING ORGANIZATION NAME AND ADDRESS		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
11. CONTROLLING OFFICE NAME AND ADDRESS US Army Electronics Research & Development Cmd Atmospheric Sciences Laboratory White Sands Missile Range, New Mexico 88002		12. REPORT DATE November 1982
		13. NUMBER OF PAGES 42
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office) US Army Electronics Research and Development Cmd Adelphi, MD 20783		15. SECURITY CLASS. (of this report) UNCLASSIFIED
		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE
16. DISTRIBUTION STATEMENT (of this Report)		
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report) Approved for public release; distribution unlimited.		
18. SUPPLEMENTARY NOTES		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number)		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) Meteorological data gathered for the launching of the 19308B MLRS, Missile Numbers BC-107, BC-109, BC-112, Round Numbers V-372/PQ-97, V-373/PQ-98, V-374/PQ-99 are presented in tabular form.		

CONTENTS	PAGE
INTRODUCTION-----	1
DISCUSSION-----	1
GENERAL AREA MAP-----	2
LAUNCH AREA DIAGRAM-----	3
TABLES:	
1. Surface Observations taken at 1545 MST at D-3 $\frac{1}{2}$ -----	4
2. Anemometer Measured Wind Data at 30 FT. AGL-----	5
3. Anemometer Measured Wind Data at 60 FT. AGL-----	6
4. Anemometer Measured Wind Data at 90 FT. AGL-----	7
5. T-Time Pilot-Balloon Measured Wind Data-----	8
6. Aiming Computer Met Messages-----	9
7. E-28 Significant Level Data at 1230 MST-----	10
8. E-28 Upper Air Data at 1230 MST-----	12
9. E-28 Mandatory Levels at 1230 MST-----	31
10. NW-30 Significant Level Data at 1330 MST-----	32
11. NW-30 Upper Air Data at 1330 MST-----	34
12. NW-30 Mandatory Levels at 1330 MST-----	38

INTRODUCTION

19308B MLRS, Missile Numbers BC-107, BC-109 and BC-112, Round Numbers V-372/PQ-97, V-373/PQ-98 and V-374/PQ-99, were launched from Brillo, White Sands Missile Range (WSMR), New Mexico, at 1545:02, 1545:06 and 1545:11 MST, 30 Nov 82. The scheduled launch times were 1530, 1530:04.5 and 1530:09 MST.

DISCUSSION

Meteorological data were recorded and reduced by the White Sands Meteorological Team, Atmospheric Sciences Laboratory (ASL), White Sands Missile Range, New Mexico. The data were obtained by the following methods:

1. Observations

a. Surface

(1) Standard surface observations to include pressure, temperature ($^{\circ}\text{C}$), relative humidity, dew point ($^{\circ}\text{C}$), density (gm/m^3), wind direction and speed, and cloud cover were made at the Brillo Met Site at T-0 minutes.

(2) Anemometer data were provided from existing tower-mounted anemometers at Brillo. Monitor of wind speed and direction from one anemometer was also provided in the launch control room.

b. Upper Air

(1) Low level wind data were obtained from pilot-balloon observations at:

SITE AND ALTITUDE

D-3 $\frac{1}{2}$ 2 km
DEADHORSE 2 km

(2) Air structure data (rawinsonde) were collected at the following Met Sites.

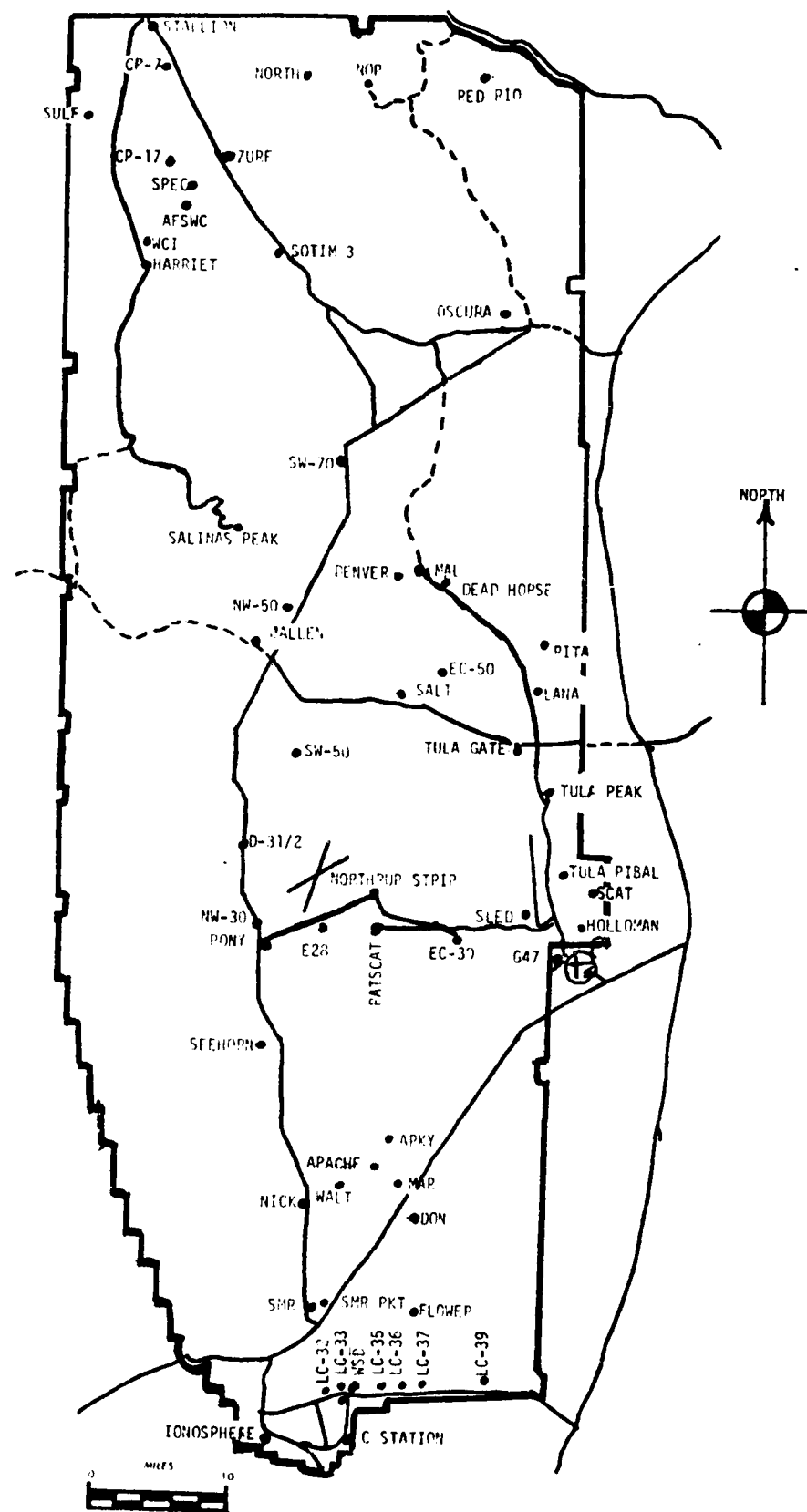
SITE AND TIME

E-28 1230 MST
NW-30 1330 MST

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DTIC TAB	<input type="checkbox"/>
Unannounced	<input type="checkbox"/>
Justification	
By	
Distribution/	
Availability Codes	
Dist	Avail and/or Special
A	



WSMR METEOROLOGICAL SITES



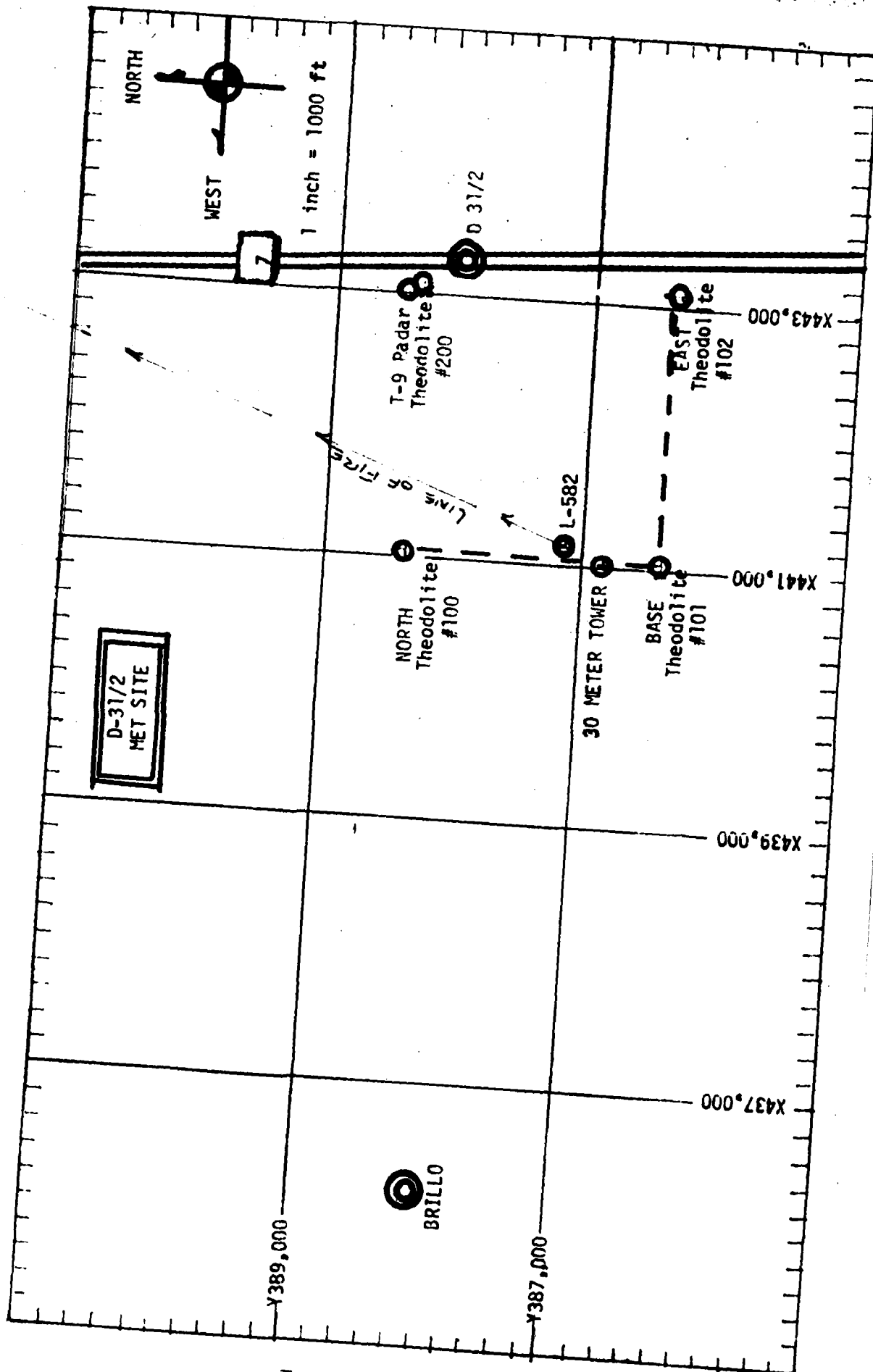


TABLE 2

Anemometer Data - 30 FT. Level of 30 Meter Tower

X= 441,018.71 Y= 386,849.19 H= 4,004.80 (BASE)

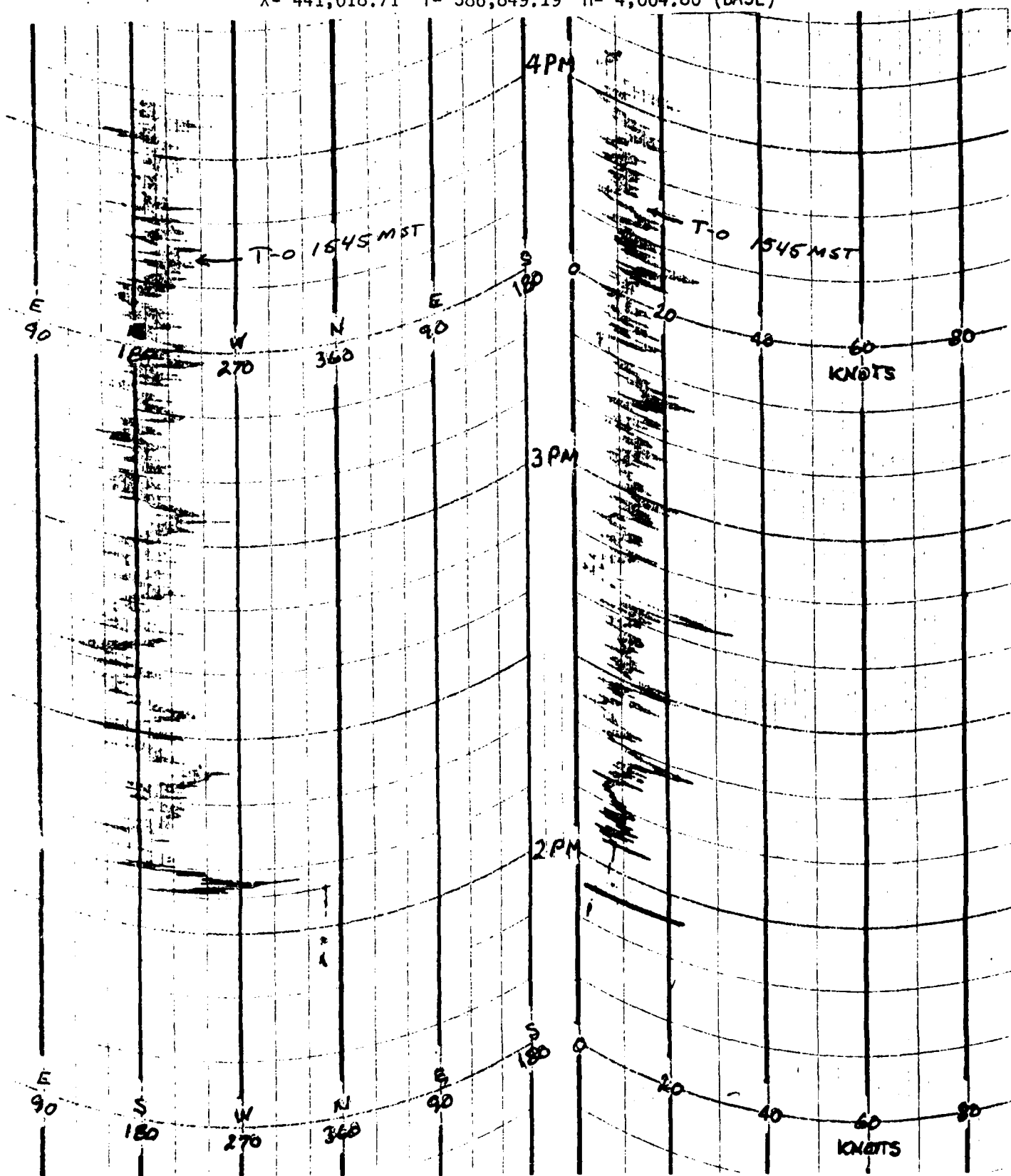


TABLE 3

Anemometer Data - 60 FT. Level of 30 Meter Tower

X= 441,018.71 Y= 386,849.19 H= 4,004.80 (BASE)

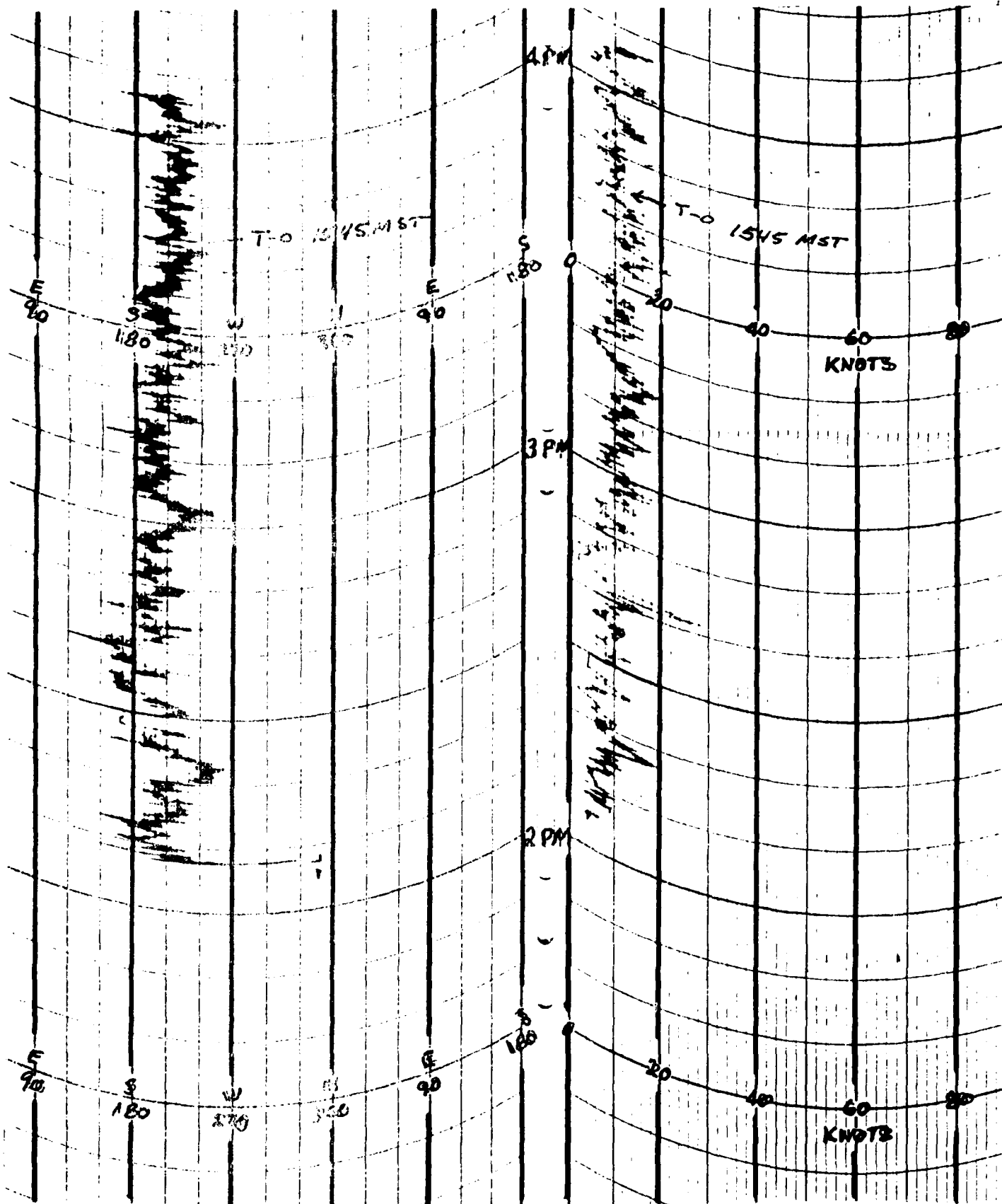


TABLE 4

Anemometer Data - 90 FT Level of 30 Meter Tower

X= 441,018.71 Y= 336,849.19 H= 4,004.80 (BASE)

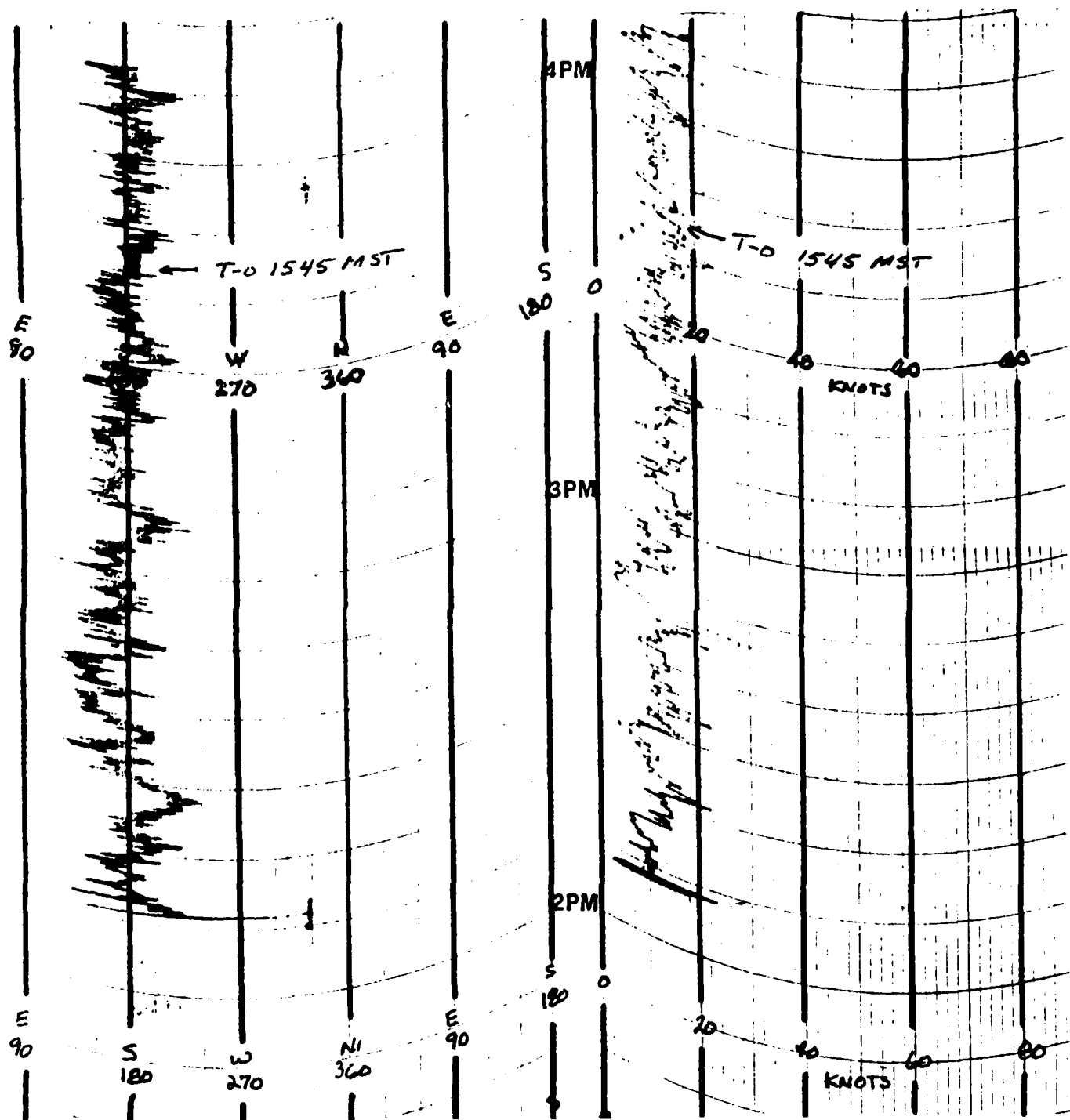


TABLE 5

1. TIME PILOT-BALLOON MEASURED WIND DATA

DATE 30 Nov 82

SITE: D-3½

TIME: 1545 MST

WSTM COORDINATES:

X= 443,023.73

Y= 388,397.95

H= 3,972.63

SITE: DEADHORSE

TIME: 1530 MST

WSTM COORDINATES:

X= 519,982.11

Y= 490,249.23

H= 4,133.72

LAYER MIDPOINT METERS AGL	DIRECTION DEGREES	SPEED KNOTS
SURFACE	210	12
150	186	19
210	186	21
270	189	20
330	194	20
390	197	19
500	201	17
650	197	21
800	192	28
950	191	31
1150	194	32
1350	196	35
1550	206	37
1750	208	41
2000	205	32

LAYER MIDPOINT METERS AGL	DIRECTION DEGREES	SPEED KNOTS
SURFACE	170	10
150	192	20
210	194	23
270	194	25
330	194	27
390	194	28
500	195	28
650	194	26
800	194	25
950	199	27
1150	212	27
1350	226	26
1550	236	30
1750	247	40
2000	246	51

All data obtained from Single Theodolite Tracked pilot-balloon observations.

TABLE 6

AIMING COMPUTER MET MESSAGES

30 Nov 82

E-28 1230 MST	NW-30 1330 MST
METCM1329064	METCM1329065
301950119873	302050122871
00338012 28910873	00338018 28860871
01395013 28600862	01383017 28720860
02386016 28370837	02385019 28410835
03386014 27980797	03377025 27990795
04401016 27490750	04375019 27500748
05423028 27190704	05415026 26980703
06444035 26930661	06439043 26800660
07449038 26620621	07426048 26620619
08456037 26360582	08433039 26250580
09467031 25960545	09453043 26030544
10478033 25600510	10454047 25610509
11476030 25250477	11448045 25150476
12475035 24690431	12452044 24500429
13477045 23800374	13475044 23730373
14497049 23090324	14479060 22880322
15504045 22590279	15481071 22360277
16504054 22260240	16494082 22250238
17492053 21910205	17473067 22010204
18476055 22190176	18475077 22030175
19465046 21910151	19457056 21990150
20452050 21550129	20438052 21420128
21460053 21590110	21457049 21030109
22421044 21320094	22431044 21220093
23432031 21000080	23401018 21270079
24443021 21070068	24439017 21120068
25430020 21260058	25404011 21420058
26424017 21580050	26382010 21410049

STATION ALTITUDE 3912.75 FEET MSL
 1230 HRS 157

SIGNIFICANT LEVEL DATA
 3340290173
 EAST-28/CHERRY
 TABLE

GEODETIC COORDINATES
 32.49927 LAT DEG
 136.46591 LONG DEG

PRECIPITATION MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	AIR TEMPERATURE CENTIGRADE	REL. HUM. PERCENT
872.6	3912.7	14.7	53.0
871.4	3950.9	12.7	50.0
850.0	4634.5	11.0	47.0
820.8	5587.8	8.2	53.0
781.5	6009.8	4.2	66.0
757.0	7758.1	1.7	76.0
730.5	8376.5	.1	82.0
724.9	8900.8	-1.2	74.0
718.0	9151.6	-1.1	70.0
714.9	9265.1	-1.0	62.0
708.7	9693.6	-1.1	60.0
700.0	9816.9	-2.2	61.0
688.5	10249.3	-2.4	46.0
668.1	11032.0	-3.8	49.0
658.6	11403.4	-4.4	57.0
655.9	11509.8	-4.4	50.0
646.6	11879.2	-5.0	44.0
640.9	12107.8	-5.6	55.0
637.1	12260.9	-6.2	64.0
610.2	13367.1	-8.1	62.0
602.7	13683.0	-8.0	48.0
590.9	14187.6	-8.7	41.0
547.5	16113.6	-13.5	39.0
530.6	16895.3	-15.3	36.0
500.0	18362.1	-18.4	36.0
466.2	20068.6	-21.8	27.0
430.1	22002.7	-26.4	23.0
418.3	22662.4	-27.7	24.0
400.0	23713.9	-30.8	29.0
367.3	25682.1	-36.6	44.0
361.4	26050.6	-37.6	58.0
349.2	26828.1	-39.0	64.0
328.1	28224.7	-42.4	
316.1	29052.9	-42.8	
300.0	30207.9	-45.2	
273.4	32235.8	-48.1	
270.4	32475.5	-47.6	
257.0	33570.3	-49.6	
250.0	34170.5	-50.5	
242.6	34815.3	-50.9	

STATION ALTITUDE 3912.75 FEET MSL
30 NOV. 82 1230 HRS MST
ASCENSION NO. 173

SIGNIFICANT LEVEL DATA
3340290173
EAST-23/CHEERY
TABLE 7 Cont'd

GEODETIC COORDINATES
32.09927 LAT DEG
136.40591 LON DEG

PRESSURE MILLIBARS MSL FEET	GEOMETRIC ALTITUDE	TEMPERATURE		REL. HUM. PERCENT
		AIR DEGREES	DEWPOINT CENTIGRADE	
234.6	35535.8	-49.9		
208.3	38070.6	-54.5		
200.0	38927.5	-55.0		
186.2	40437.2	-53.7		
175.7	41679.6	-49.1		
163.4	43239.9	-51.8		
156.4	44170.1	-54.4		
150.0	45053.2	-54.1		
144.7	45814.0	-54.1		
134.2	47397.4	-56.9		
118.6	49962.6	-59.6		
110.3	51473.8	-55.5		
100.0	53519.9	-58.8		
77.4	58762.3	-64.1		
70.0	60800.4	-62.7		
56.2	65295.6	-60.3		
50.0	67725.1	-56.4		
44.2	70297.2	-58.8		
38.6	73109.7	-58.6		
36.1	74507.5	-56.5		
30.0	78383.2	-57.4		

STATION ALTITUDE 3912.75 FEET MSL
30 NOV. 82 1230 HRS MST
ASCENSION NO. 173

UPPER AIR DATA
3340290173
EAST-28/CHERRY
TABLE 8

GEODETIC COORDINATES
32.89927 LAT DEG
136.40591 LONG DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
3912.7	872.6	14.7	53.0	1052.0	662.2	190.0	12.0	1.000275
4000.0	859.8	12.6	49.8	1057.2	659.6	192.8	12.3	1.000269
4100.0	860.7	12.3	49.3	1054.3	659.3	195.9	12.5	1.000268
4200.0	863.5	12.1	48.9	1051.5	658.9	198.9	12.8	1.000266
4300.0	860.4	11.8	48.5	1048.7	658.6	201.7	13.2	1.000265
4400.0	857.3	11.6	48.0	1045.8	658.3	204.4	13.6	1.000264
4500.0	854.2	11.3	47.6	1043.0	658.0	206.9	14.0	1.000262
4600.0	851.1	11.1	47.2	1040.2	657.7	209.3	14.4	1.000261
4700.0	848.0	10.8	47.4	1037.4	657.4	211.5	14.9	1.000260
4800.0	844.9	10.5	48.0	1034.7	657.0	213.6	15.3	1.000259
4900.0	841.8	10.2	48.7	1032.0	656.7	215.6	15.8	1.000259
5000.0	838.7	9.9	49.3	1029.3	656.4	216.9	16.2	1.000258
5100.0	835.6	9.6	49.9	1026.6	656.0	218.9	16.1	1.000257
5200.0	832.6	9.3	50.6	1023.9	655.7	216.8	16.1	1.000256
5300.0	829.5	9.0	51.2	1021.3	655.3	216.8	16.0	1.000256
5400.0	826.5	8.8	51.8	1018.6	655.0	216.8	16.0	1.000255
5500.0	823.4	8.5	52.4	1015.9	654.6	216.8	16.0	1.000254
5600.0	820.4	8.2	53.1	1013.3	654.3	216.7	15.7	1.000253
5700.0	817.4	7.9	54.1	1010.6	653.9	216.6	15.5	1.000253
5800.0	814.4	7.6	55.1	1008.0	653.6	216.5	15.2	1.000252
5900.0	811.3	7.3	56.1	1005.3	653.2	216.5	15.0	1.000252
6000.0	808.3	7.0	57.1	1002.7	652.9	216.4	14.7	1.000251
6100.0	805.3	6.7	58.0	1000.0	652.5	216.3	14.5	1.000250
6200.0	802.4	6.3	59.0	997.4	652.2	216.3	14.5	1.000250
6300.0	799.4	6.0	60.0	994.8	651.8	216.2	14.4	1.000249
6400.0	796.4	5.7	61.0	992.2	651.5	216.2	14.4	1.000248
6500.0	793.5	5.4	62.0	989.6	651.1	216.1	14.3	1.000248
6600.0	790.5	5.1	63.0	987.0	650.8	216.2	14.2	1.000247
6700.0	787.6	4.8	63.9	984.4	650.4	216.6	14.2	1.000246
6800.0	784.7	4.5	64.9	981.8	650.0	217.1	14.2	1.000246
6900.0	781.8	4.2	65.9	979.3	649.7	217.5	14.1	1.000245
7000.0	778.9	3.9	67.1	976.6	649.3	218.0	14.1	1.000244
7100.0	775.9	3.6	68.2	974.0	649.0	218.5	14.1	1.000244
7200.0	773.0	3.3	69.4	971.4	648.7	219.3	14.1	1.000243
7300.0	770.1	3.1	70.6	968.8	648.3	220.1	14.1	1.000243
7400.0	767.2	2.8	71.8	966.2	648.0	220.9	14.1	1.000242
7500.0	764.4	2.5	73.0	963.6	647.6	221.7	14.1	1.000241
7600.0	761.5	2.2	74.1	961.0	647.3	222.2	14.4	1.000241
7700.0	758.7	1.9	75.3	958.5	646.9	222.1	15.1	1.000240
7800.0	755.8	1.6	76.4	955.8	646.6	222.1	15.7	1.000239

STATION ALTITUDE 3912.75 FEET NSL
30 NOV. 82 1230 HRS MST
ASCENSION NO. 173

UPPER AIR DATA
3340290173
EAST-28/CHERRY
TABLE 8 Cont'd

GEODLTIC COORDINATES
32.69927 LAT DEG
136.40591 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
7900.0	752.9	1.3	77.4	953.1	646.3	222.0	16.4	1.000239
8000.0	750.1	1.1	78.3	950.4	646.0	222.0	17.0	1.000238
8100.0	747.3	.8	79.3	947.7	645.7	222.9	17.6	1.000237
8200.0	744.5	.6	80.3	945.1	645.4	224.1	18.2	1.000236
8300.0	741.6	.3	81.3	942.4	645.1	225.3	18.7	1.000236
8400.0	738.8	.0	81.6	939.7	644.7	226.3	19.3	1.000235
8500.0	736.0	-2	80.1	937.1	644.4	227.4	19.8	1.000233
8600.0	733.2	-5	78.6	934.5	644.1	229.1	20.2	1.000232
8700.0	730.5	-7	77.1	931.8	643.8	230.6	20.6	1.000230
8800.0	727.7	-1.0	75.5	929.2	643.5	232.1	21.0	1.000229
8900.0	724.9	-1.2	74.0	926.6	643.1	233.6	21.4	1.000228
9000.0	722.2	-1.2	72.4	923.0	643.2	234.6	21.9	1.000226
9100.0	719.4	-1.1	70.8	919.4	643.2	235.3	22.5	1.000225
9200.0	716.7	-1.1	66.6	915.8	643.3	235.9	23.1	1.000223
9300.0	714.0	-1.0	61.7	912.2	643.3	236.5	23.7	1.000221
9400.0	711.2	-1.1	60.8	908.9	643.2	237.1	24.3	1.000220
9500.0	708.5	-1.1	60.0	905.7	643.1	237.8	24.8	1.000219
9600.0	705.8	-1.5	60.3	903.4	642.7	238.4	25.4	1.000218
9700.0	703.1	-1.8	60.6	901.1	642.3	239.1	25.9	1.000217
9800.0	700.5	-2.1	60.9	898.8	641.9	239.7	26.5	1.000217
9900.0	697.8	-2.2	58.1	895.8	641.7	240.5	27.0	1.000215
10000.0	695.1	-2.3	54.6	892.6	641.7	241.8	27.6	1.000213
10100.0	692.4	-2.3	51.2	889.4	641.6	243.2	28.2	1.000212
10200.0	689.8	-2.4	47.7	886.3	641.5	244.4	28.8	1.000210
10300.0	687.2	-2.5	46.2	883.3	641.3	245.6	29.5	1.000209
10400.0	684.5	-2.7	46.6	880.5	641.1	246.5	30.0	1.000208
10500.0	681.9	-2.8	47.0	877.7	640.9	247.2	30.4	1.000208
10600.0	679.3	-3.0	47.3	874.9	640.7	247.8	30.8	1.000207
10700.0	676.7	-3.2	47.7	872.1	640.5	248.4	31.3	1.000206
10800.0	674.1	-3.4	48.1	869.4	640.3	249.0	31.7	1.000206
10900.0	671.5	-3.6	48.5	866.6	640.1	249.9	32.1	1.000205
11000.0	668.9	-3.7	48.9	863.9	639.8	248.9	32.6	1.000204
11100.0	666.4	-3.9	50.5	861.1	639.7	248.8	33.0	1.000204
11200.0	663.8	-4.1	52.6	858.2	639.5	248.7	33.5	1.000204
11300.0	661.2	-4.2	54.8	855.4	639.3	248.9	34.0	1.000203
11400.0	658.7	-4.4	56.9	852.6	639.1	249.2	34.6	1.000203
11500.0	656.1	-4.4	50.6	849.4	639.1	249.5	35.3	1.000201
11600.0	653.6	-4.5	48.5	846.7	638.9	249.8	35.9	1.000200
11700.0	651.1	-4.7	46.9	844.0	638.7	250.1	36.5	1.000199
11800.0	648.6	-4.9	45.3	841.3	638.5	250.6	37.0	1.000198

GEODETIC COORDINATES
32.8927 LAT DEG
136.40591 LONG DEG

UPPER AIR DATA
3340290173
EAST-28/CHERRY
TABLE 8 Cont'd

STATION ALTITUDE 3912.75 FEET NSL
30 NOV. 62
ASCENSION NO. 1/3

GEOMETRIC ALTITUDE NSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION (IN) SPEED KNOTS	INDEX OF REFRACTION
11900.0	640.1	-5.1	-15.1	45.0	838.0	638.2	251.0	1.000197
12000.0	643.6	-5.3	-14.1	49.8	836.1	638.0	251.4	1.000197
12100.0	641.1	-5.6	-13.2	54.6	833.6	637.7	251.8	1.000197
12200.0	638.6	-6.0	-12.4	60.4	831.5	637.2	252.0	1.000198
12300.0	636.1	-6.3	-12.0	63.9	829.1	636.9	252.1	1.000198
12400.0	633.7	-6.4	-12.1	63.7	826.5	636.7	252.3	1.000197
12500.0	631.2	-6.6	-12.3	63.6	823.8	636.5	252.4	1.000196
12600.0	628.7	-6.8	-12.5	63.4	821.1	636.3	252.6	1.000195
12700.0	626.3	-7.0	-12.7	63.2	818.5	636.1	252.8	1.000195
12800.0	623.8	-7.1	-12.9	63.0	815.8	635.8	253.1	1.000194
12900.0	621.4	-7.3	-13.1	62.8	813.2	635.6	253.4	1.000193
13000.0	619.0	-7.5	-13.3	62.7	810.6	635.4	253.7	1.000192
13100.0	616.6	-7.6	-13.5	62.5	807.9	635.2	254.0	1.000192
13200.0	614.2	-7.8	-13.7	62.3	805.3	635.0	254.4	1.000191
13300.0	611.8	-8.0	-13.9	62.1	802.7	634.8	254.8	1.000190
13400.0	609.4	-8.1	-14.3	60.5	799.9	634.7	255.2	1.000189
13500.0	607.0	-8.1	-15.2	56.1	796.8	634.7	255.3	1.000188
13600.0	604.7	-8.0	-16.2	51.7	793.7	634.7	255.3	1.000186
13700.0	602.3	-8.0	-17.1	47.8	790.6	634.7	255.2	1.000185
13800.0	599.9	-8.2	-17.6	46.4	788.0	634.5	255.1	1.000184
13900.0	597.6	-8.3	-18.1	45.0	785.3	634.3	255.1	1.000183
14000.0	595.3	-8.4	-18.6	43.6	782.7	634.1	255.2	1.000182
14100.0	592.9	-8.6	-19.1	42.2	780.1	633.9	255.3	1.000181
14200.0	590.6	-8.7	-19.6	41.0	777.5	633.8	255.5	1.000180
14300.0	588.3	-9.0	-19.8	40.9	775.1	633.5	255.6	1.000180
14400.0	585.9	-9.2	-20.1	40.8	772.8	633.1	255.8	1.000179
14500.0	583.6	-9.5	-20.3	40.7	770.5	632.8	256.0	1.000178
14600.0	581.3	-9.7	-20.6	40.6	768.2	632.5	256.2	1.000178
14700.0	579.0	-10.0	-20.8	40.5	765.9	632.2	256.4	1.000177
14800.0	576.7	-10.2	-21.1	40.4	763.6	631.9	255.9	1.000176
14900.0	574.5	-10.5	-21.4	40.3	761.3	631.6	255.3	1.000176
15000.0	572.2	-10.7	-21.6	40.2	759.0	631.3	254.6	1.000175
15100.0	569.9	-11.0	-21.9	40.1	756.8	631.0	253.9	1.000174
15200.0	567.7	-11.2	-22.1	39.9	754.5	630.7	254.2	1.000174
15300.0	565.4	-11.5	-22.4	39.8	752.2	630.4	254.7	1.000173
15400.0	563.2	-11.7	-22.6	39.7	750.0	630.1	255.2	1.000173
15500.0	561.0	-12.0	-22.9	39.6	747.7	629.8	255.7	1.000172
15600.0	558.8	-12.2	-23.1	39.5	745.5	629.5	257.3	1.000171
15700.0	556.5	-12.5	-23.4	39.4	743.3	629.2	258.6	1.000171
15800.0	554.3	-12.7	-23.6	39.3	741.1	628.9	260.4	1.000170

STATION ALTITUDE 3912.75 FEET MSL
30 NOV. 62 1236 HRS NST
ASCENSION NO. 173

UPPER AIR DATA
3340290173
EAST-28/CHERRY
TABLE 8 Cont'd

GEODETIC COORDINATES
32.89927 LAT DEG
136.40591 LONG DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	DIRECTION DEGREES (TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
15900.0	552.2	-13.0	39.2	738.8	628.6	261.9	31.6	1.000170
16000.0	550.0	-13.2	39.1	736.6	628.3	262.2	31.8	1.000169
16100.0	547.8	-13.5	39.0	734.4	628.0	262.6	32.1	1.000168
16200.0	545.6	-13.7	38.7	732.2	627.7	262.9	32.4	1.000168
16300.0	543.4	-13.9	38.3	729.9	627.4	263.4	32.7	1.000167
16400.0	541.2	-14.2	37.9	727.6	627.1	264.3	33.2	1.000166
16500.0	539.1	-14.4	37.5	725.4	626.8	265.2	33.7	1.000166
16600.0	536.9	-14.6	37.1	723.1	626.6	266.1	34.2	1.000165
16700.0	534.8	-14.9	36.7	720.9	626.3	267.0	34.8	1.000165
16800.0	532.6	-15.1	36.4	718.6	626.0	267.7	34.4	1.000164
16900.0	530.5	-15.3	36.0	716.4	625.7	268.4	33.8	1.000163
17000.0	528.4	-15.5	36.0	714.1	625.5	269.2	33.3	1.000163
17100.0	526.2	-15.7	36.0	711.8	625.2	270.0	32.8	1.000162
17200.0	524.1	-15.9	36.0	709.5	624.9	270.4	32.3	1.000162
17300.0	522.0	-16.2	36.0	707.2	624.7	270.3	31.8	1.000161
17400.0	519.9	-16.4	36.0	705.0	624.4	270.2	31.3	1.000161
17500.0	517.8	-16.6	36.0	702.7	624.2	270.1	30.8	1.000160
17600.0	515.7	-16.8	36.0	700.4	623.9	270.0	30.3	1.000159
17700.0	513.6	-17.0	36.0	698.2	623.6	269.5	30.4	1.000159
17800.0	511.5	-17.2	36.0	695.9	623.4	268.9	30.5	1.000158
17900.0	509.4	-17.4	36.0	693.7	623.1	265.4	30.6	1.000158
18000.0	507.4	-17.6	36.0	691.5	622.9	263.9	30.8	1.000157
18100.0	505.3	-17.8	36.0	689.3	622.6	263.0	30.8	1.000157
18200.0	503.3	-18.1	36.0	687.0	622.3	262.6	30.8	1.000156
18300.0	501.3	-18.3	36.0	684.8	622.1	262.1	30.8	1.000156
18400.0	499.2	-18.5	35.8	682.6	621.8	261.7	30.7	1.000155
18500.0	497.2	-18.7	35.3	680.4	621.6	261.3	30.7	1.000154
18600.0	495.1	-18.9	34.7	678.1	621.3	262.2	30.8	1.000154
18700.0	493.1	-19.1	34.2	675.9	621.1	263.1	30.9	1.000153
18800.0	491.1	-19.3	33.7	673.6	620.8	264.0	31.1	1.000153
18900.0	489.1	-19.5	33.2	671.4	620.6	264.8	31.2	1.000152
19000.0	487.1	-19.7	32.6	669.2	620.3	265.4	31.3	1.000152
19100.0	485.1	-19.9	32.1	667.0	620.1	265.4	31.2	1.000151
19200.0	483.1	-20.1	31.6	664.8	619.9	265.3	31.2	1.000150
19300.0	481.1	-20.3	31.1	662.6	619.6	265.3	31.1	1.000150
19400.0	479.2	-20.5	30.5	660.4	619.4	265.3	31.1	1.000149
19500.0	477.2	-20.7	30.0	658.2	619.1	265.3	31.1	1.000148
19600.0	475.2	-20.9	29.5	656.1	618.9	265.3	31.1	1.000148
19700.0	473.3	-21.1	28.9	653.9	618.6	265.3	31.2	1.000148
19800.0	471.4	-21.3	28.4	651.7	618.4	265.3	31.2	1.000147

STATION ALTITUDE 3912.75 FEET MSL
30 NOV. 82
ASCENSION NO. 173

UPPER AIR DATA
3340290173
EAST-28/CHERRY
TABLE 8 Cont'd

GEODETIC COORDINATES
32.89927 LAT DEG
136.40591 LONG DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES DEWPOINT CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CM ³ METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION (TN) SPEED KNOTS	INDEX OF REFRACTION
19900.0	469.4	-21.5	27.9	649.6	618.1	265.4	1.000147
20000.0	467.5	-21.7	27.4	647.5	617.9	265.4	1.000146
20100.0	465.6	-21.9	26.9	645.3	617.6	265.5	1.000145
20200.0	463.7	-22.1	26.7	643.3	617.3	265.5	1.000145
20300.0	461.7	-22.4	26.5	641.2	617.0	265.6	1.000144
20400.0	459.8	-22.6	26.3	639.1	616.7	265.6	1.000144
20500.0	457.9	-22.8	26.1	637.1	616.4	265.6	1.000143
20600.0	456.0	-23.1	25.9	635.1	616.1	265.6	1.000143
20700.0	454.1	-23.3	25.7	633.0	615.9	266.1	1.000142
20800.0	452.2	-23.5	25.5	631.0	615.6	266.3	1.000142
20900.0	450.3	-23.8	25.3	629.0	615.3	266.4	1.000141
21000.0	448.5	-24.0	25.1	627.0	615.0	266.7	1.000141
21100.0	446.6	-24.3	24.9	624.9	614.7	267.0	1.000141
21200.0	444.7	-24.5	24.7	622.9	614.4	267.3	1.000140
21300.0	442.9	-24.7	24.5	621.0	614.1	267.6	1.000140
21400.0	441.0	-25.0	24.2	619.0	613.8	267.9	1.000139
21500.0	439.2	-25.2	24.0	617.0	613.5	268.6	1.000139
21600.0	437.4	-25.4	23.8	615.0	613.2	269.3	1.000138
21700.0	435.6	-25.7	23.6	613.0	612.9	270.1	1.000138
21800.0	433.7	-25.9	23.4	611.1	612.6	270.9	1.000137
21900.0	431.9	-26.2	23.2	609.1	612.3	271.6	1.000137
22000.0	430.1	-26.4	23.0	607.2	612.0	272.0	1.000136
22100.0	428.3	-26.6	23.1	605.1	611.8	272.0	1.000136
22200.0	426.5	-26.8	23.3	603.1	611.5	272.0	1.000135
22300.0	424.7	-27.0	23.5	601.0	611.3	272.0	1.000135
22400.0	423.0	-27.2	23.6	599.0	611.0	272.1	1.000134
22500.0	421.2	-27.4	23.8	596.9	610.8	271.9	1.000134
22600.0	419.4	-27.6	23.9	594.9	610.5	271.4	1.000133
22700.0	417.6	-27.8	24.2	592.9	610.2	271.0	1.000133
22800.0	415.9	-28.1	24.7	591.1	609.9	270.6	1.000133
22900.0	414.1	-28.4	25.1	589.3	609.5	270.1	1.000132
23000.0	412.3	-28.7	25.6	587.5	609.1	269.9	1.000132
23100.0	410.6	-29.0	26.1	585.7	608.8	269.8	1.000131
23200.0	408.8	-29.3	26.6	584.0	608.4	269.8	1.000131
23300.0	407.1	-29.6	27.0	582.2	608.0	269.8	1.000131
23400.0	405.4	-29.9	27.5	580.4	607.7	269.8	1.000130
23500.0	403.7	-30.2	28.0	578.7	607.3	269.8	1.000130
23600.0	401.9	-30.5	28.5	576.9	606.9	269.8	1.000129
23700.0	400.2	-30.8	28.9	575.1	606.6	269.8	1.000129
23800.0	398.5	-31.1	29.7	573.4	606.2	269.9	1.000129

STATION ALTITUDE 3912.75 FEET MSL
 30 NOV. 12 1230 HRS MST
 ASCENSION NO. 173

UPPER AIR DATA
 3340290173
 EAST-28/CHERRY
 TABLE 8 Cont'd

GEODETIC COORDINATES
 32.89927 LAT DEG
 136.40591 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	TEMPERATURE DEWPOINT CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION (DEGREES(TN))	SPEED KNOTS	INDEX OF REFRACTION
23900.0	390.8	-31.3	-43.0	30.4	571.6	605.8	269.9	40.0	1.000128
24000.0	395.1	-31.6	-43.0	31.2	569.8	605.5	269.7	40.4	1.000128
24100.0	393.4	-31.9	-43.0	31.9	568.0	605.1	269.1	40.9	1.000127
24200.0	391.7	-32.2	-43.1	32.7	566.3	604.7	268.6	41.4	1.000127
24300.0	390.0	-32.5	-43.1	33.5	564.5	604.4	268.0	41.9	1.000127
24400.0	388.3	-32.8	-43.2	34.2	562.8	604.0	267.5	42.4	1.000126
24500.0	386.6	-33.1	-43.3	35.0	561.0	603.6	267.0	42.9	1.000126
24600.0	384.9	-33.4	-43.3	35.8	559.3	603.2	266.9	43.4	1.000125
24700.0	383.3	-33.7	-43.4	36.5	557.5	602.9	266.9	43.9	1.000125
24800.0	381.6	-34.0	-43.5	37.3	555.8	602.5	266.8	44.4	1.000125
24900.0	380.0	-34.3	-43.6	38.0	554.1	602.1	266.7	45.0	1.000124
25000.0	378.3	-34.6	-43.7	38.8	552.4	601.8	266.6	45.5	1.000124
25100.0	376.7	-34.9	-43.7	39.6	550.7	601.4	266.9	46.1	1.000123
25200.0	375.1	-35.2	-43.8	40.3	549.0	601.0	267.9	46.4	1.000123
25300.0	373.4	-35.5	-43.9	41.1	547.3	600.6	268.4	46.7	1.000122
25400.0	371.8	-35.8	-44.0	41.8	545.6	600.3	268.9	47.0	1.000122
25500.0	370.2	-36.1	-44.2	42.6	543.9	599.9	269.4	47.2	1.000122
25600.0	368.6	-36.4	-44.3	43.4	542.2	599.5	269.6	47.1	1.000121
25700.0	367.0	-36.6	-44.3	44.7	540.5	599.2	269.8	47.0	1.000121
25800.0	365.4	-36.9	-43.8	48.5	538.8	598.8	270.0	46.9	1.000120
25900.0	363.8	-37.2	-43.3	52.3	537.0	598.5	270.3	46.7	1.000120
26000.0	362.2	-37.5	-42.9	56.1	535.3	598.1	270.5	46.6	1.000120
26100.0	360.6	-37.7	-42.8	50.4	533.5	597.8	270.8	46.3	1.000119
26200.0	359.0	-37.9	-42.8	59.2	531.5	597.6	271.1	46.0	1.000119
26300.0	357.4	-38.0	-42.9	59.9	529.6	597.4	271.4	45.7	1.000118
26400.0	355.9	-38.2	-42.9	60.7	527.6	597.2	271.8	45.4	1.000118
26500.0	354.3	-38.4	-43.0	61.5	525.7	596.9	272.1	45.1	1.000118
26600.0	352.7	-38.6	-43.1	62.2	523.8	596.7	272.5	44.9	1.000117
26700.0	351.2	-38.8	-43.1	63.0	521.9	596.5	272.8	44.9	1.000117
26800.0	349.6	-38.9	-43.2	63.8	520.0	596.2	273.1	44.9	1.000116
26900.0	348.1	-39.2	-43.8	60.7**	518.2	595.9	273.4	44.9	1.000116
27000.0	346.5	-39.4	-44.8	56.1**	516.4	595.6	273.7	44.8	1.000115
27100.0	345.0	-39.7	-45.8	51.5**	514.7	595.3	274.0	45.0	1.000115
27200.0	343.5	-39.9	-46.8	47.0**	512.9	595.0	274.3	45.1	1.000114
27300.0	341.9	-40.1	-48.0	42.4**	511.2	594.7	274.5	45.3	1.000114
27400.0	340.4	-40.4	-49.2	37.8**	509.4	594.4	274.8	45.4	1.000113
27500.0	338.9	-40.6	-50.5	33.2**	507.7	594.1	275.1	45.6	1.000113
27600.0	337.4	-40.9	-52.0	28.6**	506.0	593.8	275.3	45.8	1.000113
27700.0	335.9	-41.1	-53.7	24.0**	504.3	593.4	275.5	46.1	1.000112
27800.0	334.4	-41.4	-55.6	19.5**	502.5	593.1			

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 3912.75 FEET MSL
 30 NOV. 82
 ASCENSION NO. 173

UPPER AIR DATA
 3340290173
 EAST-28/CHERRY
 TABLE 3 CONT'D

GEODETIC COORDINATES
 32.89927 LAT DEG
 136.40591 LONG DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMP (AIR) DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	"IND DATA" DIRECTION (DEGREES)TN	SPEED KNOTS	INDEX OF REFRACTION
27900.0	332.0	-41.6	14.9**	500.8	592.8	275.7	46.3	1.000112
28000.0	331.0	-41.9	10.3**	499.1	592.5	275.9	46.5	1.000111
28100.0	329.9	-42.1	5.7**	497.4	592.2	276.0	47.0	1.000111
28200.0	328.5	-42.3	1.1**	495.8	591.9	276.2	47.5	1.000110
28300.0	327.0	-42.4		493.7	591.7	276.3	48.0	1.000110
28400.0	325.5	-42.5		491.6	591.7	276.4	48.6	1.000109
28500.0	324.1	-42.5		489.5	591.6	276.5	49.1	1.000109
28600.0	322.6	-42.6		487.4	591.6	276.9	48.9	1.000109
28700.0	321.2	-42.6		485.3	591.5	277.2	48.8	1.000108
28800.0	319.7	-42.7		483.3	591.4	277.5	48.7	1.000108
28900.0	318.3	-42.7		481.2	591.4	277.9	48.6	1.000107
29000.0	316.9	-42.8		479.1	591.3	278.2	48.5	1.000107
29100.0	315.4	-42.9		477.2	591.1	278.8	48.0	1.000106
29200.0	314.0	-43.1		475.5	590.9	279.5	47.5	1.000106
29300.0	312.6	-43.3		473.8	590.6	280.1	47.0	1.000106
29400.0	311.2	-43.5		472.1	590.3	280.8	46.5	1.000105
29500.0	309.8	-43.7		470.4	590.1	281.6	46.0	1.000105
29600.0	308.4	-43.9		468.7	589.8	282.2	45.4	1.000104
29700.0	307.0	-44.1		467.0	589.5	282.7	44.7	1.000104
29800.0	305.6	-44.4		465.3	589.3	283.3	44.0	1.000104
29900.0	304.2	-44.6		463.6	589.0	283.9	43.3	1.000103
30000.0	302.8	-44.8		461.9	588.7	284.6	42.7	1.000103
30100.0	301.5	-45.0		460.3	588.5	285.0	42.2	1.000103
30200.0	300.1	-45.2		458.6	588.2	284.9	42.3	1.000102
30300.0	298.7	-45.3		456.8	588.0	284.8	42.4	1.000102
30400.0	297.4	-45.5		455.0	587.8	284.7	42.5	1.000101
30500.0	296.0	-45.6		453.2	587.6	284.6	42.6	1.000101
30600.0	294.7	-45.8		451.4	587.5	284.5	42.7	1.000101
30700.0	293.3	-45.9		449.6	587.3	284.2	43.4	1.000100
30800.0	292.0	-46.0		447.9	587.1	284.0	44.1	1.000100
30900.0	290.6	-46.2		446.1	586.9	283.7	44.8	1.000099
31000.0	289.3	-46.3		444.4	586.7	283.5	45.4	1.000099
31100.0	288.0	-46.5		442.6	586.5	283.3	46.1	1.000099
31200.0	286.7	-46.6		440.9	586.4	283.2	46.4	1.000098
31300.0	285.4	-46.8		439.1	586.2	283.3	46.5	1.000098
31400.0	284.1	-46.9		437.4	586.0	283.4	46.6	1.000097
31500.0	282.8	-47.0		435.7	585.8	283.5	46.6	1.000097
31600.0	281.5	-47.2		434.0	585.6	283.5	46.7	1.000097
31700.0	280.2	-47.3		432.2	585.4	283.6	46.8	1.000096
31800.0	278.9	-47.5		430.5	585.2	283.7	46.8	1.000096

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

GEODETIC COORDINATES
32.09927 LAT DEG
136.40591 LON DEG

UPPER AIR DATA
3340290173
EAST-28/CHERRY
TABLE 8 Cont'd

STATION ALTITUDE 3912.75 FEET MSL
30 NOV. 82
ASCENSION NO. 173

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION (DEGREES TN)	SPEED KNOTS	INDEX OF REFRACTION
31900.0	277.6	-47.6		428.8	585.1	263.7	46.8	1.000096
32000.0	276.4	-47.8		427.2	584.9	263.8	46.9	1.000095
32100.0	275.1	-47.9		425.5	584.7	263.9	46.9	1.000095
32200.0	273.8	-48.0		423.8	584.5	263.9	46.9	1.000094
32300.0	272.6	-48.0		421.7	584.6	264.1	46.9	1.000094
32400.0	271.3	-47.8		419.4	584.9	264.4	46.7	1.000093
32500.0	270.1	-47.6		417.2	585.0	264.7	46.5	1.000093
32600.0	268.9	-47.8		415.7	584.8	265.0	46.3	1.000093
32700.0	267.6	-48.0		414.1	584.6	265.4	46.2	1.000092
32800.0	266.4	-48.2		412.5	584.3	265.7	46.0	1.000092
32900.0	265.2	-48.4		410.9	584.1	265.8	46.6	1.000092
33000.0	263.9	-48.6		409.4	583.8	265.4	47.3	1.000091
33100.0	262.7	-48.7		407.8	583.6	265.2	48.1	1.000091
33200.0	261.5	-48.9		406.3	583.4	265.1	48.8	1.000090
33300.0	260.3	-49.1		404.7	583.1	264.9	49.5	1.000090
33400.0	259.1	-49.3		403.2	582.9	264.6	50.1	1.000090
33500.0	257.9	-49.5		401.7	582.7	264.4	50.7	1.000089
33600.0	256.7	-49.6		400.1	582.4	264.1	51.3	1.000089
33700.0	255.5	-49.8		398.5	582.2	263.9	51.9	1.000089
33800.0	254.3	-49.9		397.0	582.0	263.8	52.2	1.000088
33900.0	253.2	-50.1		395.4	581.8	263.9	52.2	1.000088
34000.0	252.0	-50.2		393.8	581.6	264.0	52.3	1.000088
34100.0	250.8	-50.4		392.3	581.4	264.1	52.3	1.000087
34200.0	249.7	-50.5		390.7	581.3	264.2	52.3	1.000087
34300.0	248.5	-50.6		388.9	581.2	264.1	52.7	1.000087
34400.0	247.3	-50.6		387.2	581.1	264.1	53.2	1.000086
34500.0	246.2	-50.7		385.6	581.0	264.0	53.6	1.000086
34600.0	245.0	-50.8		383.9	581.0	263.9	54.1	1.000086
34700.0	243.9	-50.8		382.2	580.9	263.7	54.9	1.000085
34800.0	242.8	-50.9		380.5	580.8	263.4	56.1	1.000085
34900.0	241.6	-50.8		378.6	580.9	263.2	57.4	1.000084
35000.0	240.5	-50.6		376.6	581.1	262.9	58.6	1.000084
35100.0	239.4	-50.5		374.8	581.3	262.6	59.9	1.000083
35200.0	238.3	-50.4		372.6	581.5	262.6	60.4	1.000083
35300.0	237.2	-50.2		370.7	581.7	262.6	60.7	1.000083
35400.0	236.1	-50.1		368.7	581.8	262.6	61.0	1.000082
35500.0	235.0	-49.9		366.8	582.0	262.6	61.4	1.000082
35600.0	233.9	-50.0		365.2	581.9	262.6	61.7	1.000081
35700.0	232.8	-50.2		363.8	581.7	262.8	61.1	1.000081
35800.0	231.7	-50.4		362.3	581.5	263.0	60.0	1.000081

STATION ALTITUDE 3912.75 FEET SL
 36 NOV. 82
 ASCENSION NO. 173

UPPER AIR DATA
 3340290173
 EAST-28/CHERRY
 TABLE 8 CONT'D

GEODETIC COORDINATES
 32.8927 LAT DEG
 136.40591 LONG DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	DEWPOINT CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	DIRECTION DEGREES (TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
35000.0	230.0	-50.6			360.9	581.2	283.3	59.0	1.000080
35000.0	229.5	-50.7			359.5	581.0	283.6	58.0	1.000080
35100.0	229.5	-50.9			358.2	580.8	283.9	56.9	1.000080
35200.0	227.4	-51.1			356.8	580.5	284.2	56.0	1.000079
35300.0	226.3	-51.3			355.4	580.3	284.4	55.2	1.000079
35400.0	225.3	-51.5			354.0	580.0	284.6	54.4	1.000079
35500.0	224.2	-51.6			352.7	579.8	284.9	53.7	1.000079
35600.0	223.2	-51.8			351.3	579.6	285.1	52.9	1.000078
35700.0	222.1	-52.0			349.9	579.3	285.4	52.1	1.000078
35800.0	221.1	-52.2			348.6	579.1	285.4	51.6	1.000078
35900.0	220.1	-52.4			347.2	578.9	285.5	51.0	1.000077
37000.0	219.0	-52.6			345.9	578.6	285.5	50.5	1.000077
37100.0	218.0	-52.7			344.6	578.4	285.6	50.0	1.000077
37200.0	217.0	-52.9			343.2	578.1	285.6	49.5	1.000076
37300.0	216.0	-53.1			341.9	577.9	285.5	49.0	1.000076
37400.0	215.0	-53.3			340.6	577.7	285.1	48.6	1.000076
37500.0	214.0	-53.5			339.3	577.4	284.7	48.2	1.000076
37600.0	212.9	-53.6			338.0	577.2	284.3	47.8	1.000075
37700.0	212.0	-53.8			336.7	576.9	283.9	47.4	1.000075
37800.0	211.0	-54.0			335.4	576.7	283.4	47.0	1.000075
37900.0	210.0	-54.2			334.1	576.5	282.6	47.1	1.000074
38000.0	209.0	-54.4			332.8	576.2	281.6	47.3	1.000074
38100.0	208.0	-54.5			331.4	576.0	280.9	47.4	1.000074
38200.0	207.0	-54.6			330.0	576.0	280.1	47.6	1.000073
38300.0	206.0	-54.6			328.5	575.9	279.3	47.9	1.000073
38400.0	205.1	-54.7			327.0	575.6	278.3	48.7	1.000073
38500.0	204.1	-54.8			325.6	575.7	277.3	49.6	1.000073
38600.0	203.1	-54.8			324.1	575.7	276.3	50.5	1.000072
38700.0	202.2	-54.9			322.7	575.6	275.4	51.5	1.000072
38800.0	201.2	-54.9			321.2	575.5	274.6	52.5	1.000072
38900.0	200.3	-55.0			319.8	575.4	273.7	53.9	1.000071
39000.0	199.3	-54.9			318.2	575.5	272.9	55.4	1.000071
39100.0	198.4	-54.9			316.6	575.6	272.1	56.8	1.000071
39200.0	197.4	-54.8			314.9	575.7	271.4	58.3	1.000070
39300.0	196.5	-54.7			313.3	575.8	270.7	59.7	1.000070
39400.0	195.6	-54.6			311.7	575.9	270.0	60.9	1.000069
39500.0	194.7	-54.5			310.1	576.1	269.3	62.1	1.000069
39600.0	193.7	-54.4			308.6	576.2	268.6	63.4	1.000069
39700.0	192.8	-54.3			307.0	576.3	268.0	64.6	1.000068
39800.0	191.9	-54.2			305.4	576.4	267.4	65.0	1.000068

GEODETIC COORDINATES
32.89927 LAT DEG
136.40591 LON DEG

UPPER AIR DATA
3340290173
EAST-28/CHEERY
TABLE 8 Cont'd

STATION ALTITUDE 3912.75 FT. T MSL
30 NOV. 82
ASCENSION NO. 173

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
						DIRECTION DEGREES (TN)	SPEED KNOTS	
3900.0	191.0	-54.2		303.8	576.5	266.9	64.4	1.000068
4000.0	190.1	-54.1		302.3	576.6	266.3	63.8	1.000067
4100.0	189.2	-54.0		300.7	576.7	265.7	63.3	1.000067
4200.0	188.3	-53.9		299.2	576.8	265.2	62.7	1.000067
4300.0	187.4	-53.8		297.7	577.0	264.9	61.8	1.000066
4400.0	186.5	-53.7		296.1	577.1	265.0	60.8	1.000066
4500.0	185.7	-53.5		294.4	577.4	265.0	59.7	1.000066
4600.0	184.8	-53.1		292.5	577.9	265.0	58.6	1.000065
4700.0	183.9	-52.7		290.7	578.4	265.1	57.6	1.000065
4800.0	183.1	-52.4		288.8	578.9	265.2	56.6	1.000064
4900.0	182.2	-52.0		287.0	579.4	265.5	56.0	1.000064
5000.0	181.4	-51.6		285.2	579.8	265.9	55.4	1.000064
5100.0	180.5	-51.2		283.4	580.3	266.2	54.8	1.000063
5200.0	179.7	-50.9		281.6	580.8	266.6	54.2	1.000063
5300.0	178.8	-50.5		279.8	581.3	267.0	53.6	1.000062
5400.0	178.0	-50.1		278.1	581.8	267.3	53.1	1.000062
5500.0	177.2	-49.8		276.3	582.3	267.7	52.5	1.000062
5600.0	176.4	-49.4		274.6	582.7	268.0	52.0	1.000061
5700.0	175.5	-49.1		273.0	583.1	268.3	51.4	1.000061
5800.0	174.7	-49.3		271.9	582.9	268.7	50.9	1.000061
5900.0	173.9	-49.5		270.9	582.6	269.0	50.4	1.000060
6000.0	173.1	-49.7		269.8	582.4	269.3	50.0	1.000060
6100.0	172.3	-49.8		268.8	582.2	269.6	49.6	1.000060
6200.0	171.5	-50.0		267.7	582.0	269.8	49.3	1.000060
6300.0	170.7	-50.2		266.7	581.7	270.1	48.9	1.000059
6400.0	169.9	-50.3		265.7	581.5	270.4	48.6	1.000059
6500.0	169.1	-50.5		264.6	581.3	270.5	48.3	1.000059
6600.0	168.3	-50.7		263.6	581.1	270.5	48.0	1.000059
6700.0	167.6	-50.9		262.6	580.8	270.4	47.8	1.000058
6800.0	166.8	-51.0		261.6	580.6	270.3	47.6	1.000058
6900.0	166.0	-51.2		260.6	580.4	270.2	47.3	1.000058
7000.0	165.2	-51.4		259.6	580.2	270.1	47.1	1.000058
7100.0	164.5	-51.6		258.6	579.9	269.7	47.0	1.000058
7200.0	163.7	-51.7		257.6	579.7	269.3	47.0	1.000057
7300.0	162.9	-52.0		256.6	579.4	268.9	47.0	1.000057
7400.0	162.2	-52.2		255.7	579.0	268.5	46.9	1.000057
7500.0	161.4	-52.5		254.9	578.7	268.1	46.9	1.000057
7600.0	160.7	-52.8		254.0	578.3	267.7	46.9	1.000057
7700.0	159.9	-53.1		253.1	577.9	267.3	47.0	1.000056
7800.0	159.1	-53.4		252.3	577.6	266.8	47.1	1.000056

STATION ALTITUDE 3412.75 FEET MS
 70 AV. P2 1230 HPC MS
 ASCENSION NO. 173

UPPER AIR DATA
 3340240173
 EAST-28/CHERRY
 TABLE 3 CONT'D

GEODETIC COORDINATES
 32.89927 LAT 1E3
 136.40591 LONG 1E5

GEODETIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
3400.0	158.4	-53.6		251.4	577.2	252.4	47.2	1.000050
3390.0	157.7	-53.0		250.5	576.8	250.0	47.3	1.000050
3380.0	157.1	-54.2		249.7	576.5	249.5	47.2	1.000050
3370.0	156.7	-54.8		248.7	576.2	248.2	47.4	1.000050
3360.0	156.4	-54.4		247.5	576.0	247.9	47.3	1.000050
3350.0	156.7	-54.3		246.3	576.3	246.0	47.3	1.000050
3340.0	156.0	-54.3		245.1	576.5	244.4	47.2	1.000050
3330.0	155.3	-54.3		243.9	576.4	244.1	47.2	1.000050
3320.0	154.5	-54.2		242.7	576.4	243.8	47.2	1.000050
3310.0	151.3	-54.2		241.5	576.5	243.8	47.1	1.000050
3300.0	151.3	-54.2		240.3	576.5	243.3	47.1	1.000050
3290.0	150.4	-54.1		239.2	576.6	243.1	47.0	1.000050
3280.0	149.7	-54.1		238.0	576.6	242.8	47.0	1.000050
3270.0	149.0	-54.1		236.9	576.6	242.8	47.0	1.000050
3260.0	148.3	-54.1		235.8	576.6	242.3	46.9	1.000050
3250.0	147.6	-54.1		234.7	576.6	242.0	46.9	1.000050
3240.0	146.8	-54.1		233.6	576.6	241.7	46.9	1.000050
3230.0	146.2	-54.1		232.5	576.6	241.3	46.8	1.000050
3220.0	145.5	-54.1		231.4	576.6	240.9	46.8	1.000050
3210.0	144.8	-54.1		230.3	576.6	240.6	46.8	1.000050
3200.0	144.1	-54.3		229.3	576.4	240.2	46.8	1.000050
3190.0	143.4	-54.4		228.4	576.2	239.9	46.7	1.000050
3180.0	142.7	-54.6		227.5	575.9	239.5	46.6	1.000050
3170.0	142.1	-54.8		226.6	575.7	239.2	46.6	1.000050
3160.0	141.4	-55.0		225.7	575.5	238.8	46.5	1.000050
3150.0	140.7	-55.1		224.9	575.2	238.5	46.4	1.000050
3140.0	140.1	-55.3		224.0	575.0	238.1	46.3	1.000050
3130.0	139.4	-55.5		223.1	574.8	237.7	46.2	1.000050
3120.0	138.7	-55.7		222.2	574.5	237.4	46.1	1.000049
3110.0	138.1	-55.8		221.3	574.3	237.0	46.1	1.000049
3100.0	137.4	-56.0		220.5	574.1	236.6	46.0	1.000049
3090.0	136.9	-56.2		219.6	573.8	236.2	45.9	1.000049
3080.0	136.1	-56.4		218.7	573.6	235.9	45.9	1.000049
3070.0	135.5	-56.6		217.9	573.4	235.5	45.9	1.000049
3060.0	134.8	-56.7		217.0	573.1	235.2	45.9	1.000048
3050.0	134.2	-56.9		216.2	572.9	234.9	46.0	1.000048
3040.0	133.5	-57.0		215.2	572.8	234.5	46.0	1.000048
3030.0	132.9	-57.1		214.3	572.6	234.2	46.1	1.000048
3020.0	132.3	-57.2		213.4	572.5	233.8	46.2	1.000048
3010.0	131.6	-57.3		212.5	572.3	233.5	46.5	1.000047

UPPER AIR DATA
3340290173
EAST-28/CHERRY
TABLE 8 Cont'd

STATION ALTITUDE 3912.75 FT MSL
30 NOV. 82 1236 HRS MST
ASCENSION NO. 173

GEODETIC COORDINATES
32.89927 LAT DEG
136.40591 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE		REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
		AIR DEGREES CENTIGRADE	DEWPOINT CENTIGRADE				DIRECTION DEGREES (TN)	SPEED KNOTS	
47900.0	131.0	-57.4			211.5	572.2	253.2	46.9	1.000047
48000.0	130.4	-57.5			210.6	572.1	252.8	47.2	1.000047
48100.0	129.7	-57.6			209.7	571.9	252.5	47.5	1.000047
48200.0	129.1	-57.7			208.8	571.8	252.2	47.9	1.000047
48300.0	128.5	-57.9			207.9	571.6	251.9	48.4	1.000046
48400.0	127.9	-58.0			207.0	571.5	251.8	49.1	1.000046
48500.0	127.3	-58.1			206.1	571.4	251.6	49.9	1.000046
48600.0	126.6	-58.2			205.2	571.2	251.5	50.6	1.000046
48700.0	126.0	-58.3			204.3	571.1	251.3	51.4	1.000046
48800.0	125.4	-58.4			203.5	570.9	251.2	52.1	1.000045
48900.0	124.8	-58.5			202.6	570.8	251.2	52.8	1.000045
49000.0	124.2	-58.6			201.7	570.7	251.5	53.5	1.000045
49100.0	123.6	-58.7			200.8	570.5	251.7	54.1	1.000045
49200.0	123.0	-58.8			200.0	570.4	251.9	54.8	1.000045
49300.0	122.4	-58.9			199.1	570.2	252.1	55.4	1.000044
49400.0	121.9	-59.0			198.2	570.1	252.3	56.1	1.000044
49500.0	121.3	-59.1			197.4	570.0	253.0	56.5	1.000044
49600.0	120.7	-59.2			196.5	569.8	253.7	56.8	1.000044
49700.0	120.1	-59.3			195.7	569.7	254.4	57.2	1.000044
49800.0	119.5	-59.4			194.8	569.5	255.1	57.6	1.000043
49900.0	119.0	-59.5			194.0	569.4	255.8	57.9	1.000043
50000.0	118.4	-59.5			193.0	569.4	256.7	58.1	1.000043
50100.0	117.8	-59.2			191.9	569.8	257.5	58.2	1.000043
50200.0	117.3	-59.0			190.7	570.2	258.4	58.4	1.000042
50300.0	116.7	-58.7			189.6	570.5	259.2	58.6	1.000042
50400.0	116.1	-58.4			188.4	570.9	259.8	58.6	1.000042
50500.0	115.6	-58.1			187.3	571.2	260.1	58.2	1.000042
50600.0	115.0	-57.9			186.1	571.6	260.5	57.8	1.000041
50700.0	114.5	-57.6			185.0	572.0	260.8	57.4	1.000041
50800.0	113.9	-57.3			183.9	572.3	261.1	57.0	1.000041
50900.0	113.4	-57.1			182.8	572.7	261.1	56.1	1.000041
51000.0	112.8	-56.8			181.7	573.0	260.8	54.8	1.000040
51100.0	112.3	-56.5			180.6	573.4	260.6	53.5	1.000040
51200.0	111.8	-56.2			179.5	573.8	260.3	52.3	1.000040
51300.0	111.2	-56.0			178.4	574.1	260.0	51.0	1.000040
51400.0	110.7	-55.7			177.3	574.5	259.3	49.7	1.000039
51500.0	110.2	-55.5			176.4	574.7	258.6	48.4	1.000039
51600.0	109.6	-55.7			175.6	574.5	257.8	47.1	1.000039
51700.0	109.1	-55.9			174.9	574.3	256.9	45.8	1.000039
51800.0	108.6	-56.0			174.2	574.0	256.1	44.5	1.000039

STATION ALTITUDE 5912.75 FEET MSL
30 NOV. 82
ASCENSION NO. 173

UPPER AIR DATA
3340290173
EAST-28/CHERRY
TABLE 8 Cont'd

GEODETIC COORDINATES
32.89927 LAT DEG
136.40591 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES DEWPOINT CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	DIRECTION DEGREES (TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
51900.0	105.1	-56.2		173.5	573.8	255.1	43.9	1.000039
52000.0	107.6	-56.3		172.8	573.6	254.1	43.4	1.000038
52100.0	107.0	-56.5		172.1	573.4	253.1	42.9	1.000038
52200.0	106.5	-56.7		171.4	573.2	252.1	42.4	1.000038
52300.0	106.0	-56.8		170.7	573.0	251.0	42.0	1.000038
52400.0	105.5	-57.0		170.0	572.8	250.2	42.3	1.000038
52500.0	105.0	-57.2		169.4	572.6	249.4	42.6	1.000038
52600.0	104.5	-57.3		168.7	572.3	248.5	42.9	1.000038
52700.0	104.0	-57.5		168.0	572.1	247.7	43.2	1.000037
52800.0	103.5	-57.6		167.3	571.9	246.9	43.6	1.000037
52900.0	103.0	-57.8		166.6	571.7	246.2	43.9	1.000037
53000.0	102.5	-58.0		166.0	571.5	245.6	44.2	1.000037
53100.0	102.0	-58.1		165.3	571.3	244.9	44.4	1.000037
53200.0	101.5	-58.3		164.6	571.1	244.3	44.7	1.000037
53300.0	101.1	-58.4		164.0	570.8	243.7	45.0	1.000037
53400.0	100.6	-58.6		163.3	570.6	243.1	45.3	1.000036
53500.0	100.1	-58.8		162.7	570.4	242.5	45.6	1.000036
53600.0	99.6	-58.9		161.9	570.3	242.1	45.7	1.000036
53700.0	99.1	-59.0		161.2	570.1	241.9	45.5	1.000036
53800.0	98.6	-59.1		160.5	570.0	241.6	45.2	1.000036
53900.0	98.2	-59.2		159.8	569.9	241.4	45.0	1.000036
54000.0	97.7	-59.3		159.1	569.7	241.1	44.8	1.000035
54100.0	97.2	-59.4		158.4	569.6	240.9	44.5	1.000035
54200.0	96.7	-59.5		157.7	569.5	240.6	44.3	1.000035
54300.0	96.3	-59.6		157.0	569.3	240.5	43.9	1.000035
54400.0	95.8	-59.7		156.3	569.2	240.4	43.4	1.000035
54500.0	95.3	-59.8		155.6	569.1	240.3	42.9	1.000035
54600.0	94.9	-59.9		155.0	568.9	240.2	42.5	1.000035
54700.0	94.4	-60.0		154.3	568.8	240.1	42.0	1.000034
54800.0	93.9	-60.1		153.6	568.6	240.0	41.5	1.000034
54900.0	93.5	-60.2		152.9	568.5	239.9	41.0	1.000034
55000.0	93.0	-60.3		152.2	568.4	239.4	40.2	1.000034
55100.0	92.6	-60.4		151.6	568.2	238.9	39.3	1.000034
55200.0	92.1	-60.5		150.9	568.1	238.3	38.4	1.000034
55300.0	91.7	-60.6		150.2	568.0	237.7	37.5	1.000033
55400.0	91.2	-60.7		149.6	567.8	237.1	36.6	1.000033
55500.0	90.8	-60.8		148.9	567.7	236.4	35.7	1.000033
55600.0	90.3	-60.9		148.3	567.6	235.7	34.8	1.000033
55700.0	89.9	-61.0		147.6	567.4	234.3	33.2	1.000033
55800.0	89.5	-61.1		147.0	567.3	232.7	31.6	1.000033

STATION ALTITUDE 3912.75 FEET MSL
30 NOV. 82 1230 HRS MST
ASCENSION NO. 173

UPPER AIR DATA
3340290173
EAST-28/CHEERY
TABLE 8 Cont'd

GEODETIC COORDINATES
32.89927 LAT DEG
136.40591 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	DEWPOINT CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
							DIRECTION DEGREES (TN)	SPEED KNOTS	
55900.0	89.0	-61.2			146.3	567.2	231.0	30.1	1.000033
56000.0	88.6	-61.3			145.7	567.0	229.1	28.5	1.000032
56100.0	88.2	-61.4			145.0	566.9	227.0	27.1	1.000032
56200.0	87.7	-61.5			144.4	566.8	224.6	25.6	1.000032
56300.0	87.3	-61.6			143.8	566.6	222.5	24.5	1.000032
56400.0	86.9	-61.7			143.1	566.5	221.8	24.0	1.000032
56500.0	86.4	-61.8			142.5	566.3	221.0	23.5	1.000032
56600.0	86.0	-61.9			141.9	566.2	220.3	23.0	1.000032
56700.0	85.6	-62.0			141.2	566.1	219.5	22.5	1.000031
56800.0	85.2	-62.1			140.6	565.9	218.6	22.0	1.000031
56900.0	84.8	-62.2			140.0	565.8	220.9	22.7	1.000031
57000.0	84.4	-62.3			139.4	565.7	224.1	23.8	1.000031
57100.0	83.9	-62.4			138.8	565.5	226.9	25.1	1.000031
57200.0	83.5	-62.5			138.2	565.4	229.5	26.4	1.000031
57300.0	83.1	-62.6			137.6	565.3	231.9	27.8	1.000031
57400.0	82.7	-62.7			137.0	565.1	233.9	29.1	1.000031
57500.0	82.3	-62.8			136.4	565.0	235.4	30.0	1.000030
57600.0	81.9	-62.9			135.8	564.9	236.8	30.9	1.000030
57700.0	81.5	-63.0			135.2	564.7	238.1	31.8	1.000030
57800.0	81.1	-63.1			134.6	564.6	239.4	32.8	1.000030
57900.0	80.7	-63.2			134.0	564.4	240.5	33.8	1.000030
58000.0	80.3	-63.3			133.4	564.3	241.2	34.0	1.000030
58100.0	79.9	-63.4			132.8	564.2	241.6	33.9	1.000030
58200.0	79.6	-63.5			132.2	564.0	242.0	33.8	1.000029
58300.0	79.2	-63.6			131.6	563.9	242.4	33.7	1.000029
58400.0	78.8	-63.7			131.1	563.8	242.8	33.6	1.000029
58500.0	78.4	-63.8			130.5	563.6	243.2	33.5	1.000029
58600.0	78.0	-63.9			129.9	563.5	243.4	33.1	1.000029
58700.0	77.6	-64.0			129.3	563.4	243.6	32.7	1.000029
58800.0	77.3	-64.1			128.7	563.3	243.8	32.3	1.000029
58900.0	76.9	-64.0			128.0	563.4	244.0	31.9	1.000029
59000.0	76.5	-63.9			127.4	563.5	244.2	31.5	1.000028
59100.0	76.1	-63.9			126.7	563.6	244.5	31.2	1.000028
59200.0	75.7	-63.8			126.0	563.7	244.8	30.9	1.000028
59300.0	75.4	-63.7			125.4	563.6	245.0	30.6	1.000028
59400.0	75.0	-63.7			124.7	563.9	245.3	30.4	1.000028
59500.0	74.6	-63.6			124.1	564.0	245.6	30.1	1.000028
59600.0	74.3	-63.5			123.4	564.1	245.9	29.8	1.000027
59700.0	73.9	-63.5			122.8	564.1	246.3	29.6	1.000027
59800.0	73.5	-63.4			122.1	564.2	246.6	29.5	1.000027

STATION ALTITUDE 3912.75 FT 1 ASL
 30 NOV. 42
 ASCENSION NO. 1/3

UPPER AIR DATA
 1340290173
 EAST-20/CHERRY
 TABLE 8 Cont'd

GEONOTIC COORDINATES
 32.00027 LAT DEG
 136.40591 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION (IN) SPEED (KNOTS)	INDEX OF REFRACTION
6000.0	70.2	-63.3		1.211	564.5	247.9	1.000027
6000.0	72.8	-63.2		1.211	564.4	247.3	1.000027
6100.0	72.5	-63.2		1.211	564.5	247.1	1.000027
6200.0	72.1	-63.1		1.211	564.0	247.2	1.000027
6300.0	71.7	-63.0		1.211	564.7	246.1	1.000026
6400.0	71.4	-63.0		1.211	564.0	246.3	1.000026
6500.0	71.0	-62.9		1.211	564.9	246.0	1.000026
6600.0	70.7	-62.8		1.211	565.0	246.3	1.000026
6700.0	70.3	-62.8		1.211	565.1	246.7	1.000026
6800.0	70.0	-62.7		1.211	565.2	246.4	1.000026
6900.0	69.7	-62.6		1.211	565.3	246.0	1.000026
7000.0	69.3	-62.6		1.211	565.4	245.5	1.000025
7100.0	69.0	-62.5		1.211	565.4	245.5	1.000025
7200.0	68.6	-62.4		1.211	565.5	244.0	1.000025
7300.0	68.3	-62.4		1.211	565.6	244.4	1.000025
7400.0	67.9	-62.3		1.211	565.7	244.8	1.000025
7500.0	67.6	-62.3		1.211	565.7	244.2	1.000025
7600.0	67.3	-62.3		1.211	565.8	245.5	1.000025
7700.0	67.0	-62.2		1.211	565.9	245.9	1.000025
7800.0	66.7	-62.2		1.211	565.9	246.2	1.000024
7900.0	66.3	-62.1		1.211	566.0	246.5	1.000024
8000.0	66.0	-62.1		1.211	566.1	246.8	1.000024
8100.0	65.7	-62.0		1.211	566.2	247.1	1.000024
8200.0	65.4	-62.0		1.211	566.2	247.5	1.000024
8300.0	65.1	-61.9		1.211	566.3	247.8	1.000024
8400.0	64.7	-61.8		1.211	566.4	247.9	1.000024
8500.0	64.4	-61.7		1.211	566.4	248.0	1.000024
8600.0	64.1	-61.7		1.211	566.5	248.1	1.000023
8700.0	63.8	-61.7		1.211	566.6	248.2	1.000023
8800.0	63.5	-61.6		1.211	566.6	248.3	1.000023
8900.0	63.2	-61.6		1.211	566.7	247.7	1.000023
9000.0	62.9	-61.5		1.211	566.8	247.0	1.000023
9100.0	62.6	-61.5		1.211	566.9	246.3	1.000023
9200.0	62.3	-61.4		1.211	567.0	245.5	1.000023
9300.0	62.0	-61.4		1.211	567.1	244.7	1.000022
9400.0	61.7	-61.3		1.211	567.2	242.4	1.000022
9500.0	61.4	-61.3		1.211	567.2	241.1	1.000022
9600.0	61.1	-61.2		1.211	567.3	241.1	1.000022
9700.0	60.8	-61.2		1.211	567.3	241.1	1.000022
9800.0	60.5	-61.1		1.211	567.3	241.1	1.000022

GEODETIC COORDINATES
32°59'27" LAT UEG
136°40'59" LON DEG

UPPER AIR DATA
330290143A
EAST-20/CHEERY
TABLE 8 Cont'd

STATION ALTITUDE 3912.75 FEET MSL
30 NOV. 42 1230 HRS MST
ASCENSION NO. 173

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KIOTS	WIND DATA DIRECTION (DEGREES(TN))	SPEED KIOTS	INDEX OF REFRACTION
63900.0	60.2	-61.0		96.8	567.4	249.6	16.9	1.000022
64000.0	59.9	-61.0		96.3	567.4	247.9	16.0	1.000022
64100.0	59.6	-60.9		97.8	567.5	246.1	15.2	1.000022
64200.0	59.3	-60.9		97.3	567.6	244.9	14.9	1.000022
64300.0	59.0	-60.8		96.8	567.7	244.3	15.0	1.000022
64400.0	58.7	-60.8		96.3	567.7	243.7	15.1	1.000021
64500.0	58.4	-60.7		95.8	567.8	243.2	15.1	1.000021
64600.0	58.1	-60.7		95.3	567.9	242.6	15.2	1.000021
64700.0	57.9	-60.6		94.8	567.9	242.1	15.3	1.000021
64800.0	57.6	-60.6		94.4	568.0	240.4	14.7	1.000021
64900.0	57.3	-60.5		93.9	568.1	238.3	13.9	1.000021
65000.0	57.0	-60.5		93.4	568.2	235.9	13.1	1.000021
65100.0	56.7	-60.4		92.9	568.2	233.2	12.4	1.000021
65200.0	56.5	-60.4		92.4	568.3	230.2	11.7	1.000021
65300.0	56.2	-60.3		92.0	568.4	226.6	11.0	1.000020
65400.0	55.9	-60.1		91.4	568.6	218.2	9.6	1.000020
65500.0	55.7	-60.0		90.9	568.8	207.3	8.5	1.000020
65600.0	55.4	-59.8		90.4	569.0	193.9	7.8	1.000020
65700.0	55.1	-59.7		89.9	569.2	189.6	7.8	1.000020
65800.0	54.9	-59.5		89.4	569.5	194.1	8.1	1.000020
65900.0	54.6	-59.3		88.9	569.7	198.3	8.5	1.000020
66000.0	54.3	-59.2		88.4	569.9	202.0	8.9	1.000020
66100.0	54.1	-59.0		88.0	570.1	200.8	8.8	1.000020
66200.0	53.8	-58.8		87.5	570.3	199.5	8.7	1.000019
66300.0	53.5	-58.7		87.0	570.5	198.1	8.6	1.000019
66400.0	53.3	-58.5		86.5	570.7	197.1	8.6	1.000019
66500.0	53.0	-58.4		86.0	570.9	196.4	8.5	1.000019
66600.0	52.8	-58.2		85.5	571.2	195.6	8.5	1.000019
66700.0	52.5	-58.0		85.1	571.4	194.9	8.4	1.000019
66800.0	52.3	-57.9		84.6	571.6	184.3	8.0	1.000019
66900.0	52.0	-57.7		84.1	571.8	172.9	7.8	1.000019
67000.0	51.8	-57.6		83.7	572.0	161.5	7.9	1.000019
67100.0	51.5	-57.4		83.2	572.2	150.8	8.4	1.000019
67200.0	51.3	-57.2		82.7	572.4	141.6	9.1	1.000018
67300.0	51.0	-57.1		82.3	572.7	133.6	10.0	1.000018
67400.0	50.8	-56.9		81.8	572.9	127.4	11.0	1.000018
67500.0	50.5	-56.8		81.4	573.1	128.6	10.8	1.000018
67600.0	50.3	-56.6		80.9	573.3	129.9	10.5	1.000018
67700.0	50.1	-56.4		80.5	573.5	131.3	10.3	1.000018
67800.0	49.8	-56.5		80.1	573.5	131.3	10.3	1.000018

UPPER AIR DATA
3340290173
EAST-28/CHERRY
TABLE 3 CONT'D

STATION ALTITUDE 3912.75 FEET ASL
30 NOV. 52
ASCENSION NO. 173

GEOMETRIC ALTITUDE
MSL FEET

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREE CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION (DEGREES TRUE)	SPEED KNOTS	INDEX OF REFRACTION
39000.0	49.4	-56.6	-56.6	79.7	573.5	149.0	10.6	1.000018
38000.0	49.1	-56.7	-56.7	79.8	573.2	148.0	10.4	1.000018
37100.0	48.1	-56.7	-56.7	79.8	573.1	148.4	11.1	1.000018
36200.0	48.4	-56.8	-56.8	79.7	573.0	149.3	10.3	1.000018
35300.0	48.6	-56.9	-56.9	79.4	572.8	148.8	10.0	1.000017
34400.0	48.8	-57.0	-57.0	79.0	572.7	148.0	9.9	1.000017
33500.0	48.2	-57.1	-57.1	77.7	572.0	140.7	8.0	1.000017
32600.0	47.0	-57.2	-57.2	77.4	572.5	145.0	8.1	1.000017
31700.0	47.7	-57.3	-57.3	77.0	572.4	150.2	7.4	1.000017
30800.0	47.5	-57.4	-57.4	76.7	572.2	150.6	6.7	1.000017
29900.0	47.3	-57.5	-57.5	76.3	572.1	157.2	6.0	1.000017
29000.0	47.0	-57.6	-57.6	76.0	572.0	157.0	5.2	1.000017
28100.0	46.8	-57.7	-57.7	75.7	571.9	158.7	4.3	1.000017
27200.0	46.6	-57.8	-57.8	75.4	571.7	157.0	3.7	1.000017
26300.0	46.4	-57.9	-57.9	75.0	571.6	158.5	3.0	1.000017
25400.0	46.1	-58.0	-58.0	74.7	571.5	161.1	2.2	1.000017
24500.0	45.9	-58.1	-58.1	74.4	571.4	166.5	1.4	1.000017
23600.0	45.7	-58.1	-58.1	74.1	571.2	165.9	1.0	1.000016
22700.0	45.5	-58.2	-58.2	73.7	571.1	210.1	.9	1.000016
21800.0	45.3	-58.3	-58.3	73.4	571.0	248.3	1.1	1.000016
20900.0	45.0	-58.4	-58.4	73.1	570.9	261.8	1.5	1.000016
20000.0	44.8	-58.5	-58.5	72.8	570.7	261.8	1.8	1.000016
19100.0	44.6	-58.6	-58.6	72.5	570.6	261.8	2.1	1.000016
18200.0	44.4	-58.7	-58.7	72.1	570.5	261.8	2.5	1.000016
17300.0	44.2	-58.8	-58.8	71.8	570.4	261.8	2.8	1.000016
16400.0	44.0	-58.8	-58.8	71.5	570.4	261.8	3.1	1.000016
15500.0	43.8	-58.8	-58.8	71.1	570.4	261.8	3.5	1.000016
14600.0	43.6	-58.8	-58.8	70.8	570.4	261.8	4.9	1.000016
13700.0	43.4	-58.8	-58.8	70.4	570.4	261.8	9.2	1.000016
12800.0	43.1	-58.8	-58.8	70.1	570.4	261.8	13.5	1.000016
11900.0	42.9	-58.8	-58.8	69.8	570.4	261.8	17.9	1.000016
11000.0	42.7	-58.8	-58.8	69.4	570.4	261.8	21.3	1.000015
10100.0	42.5	-58.7	-58.7	69.1	570.4	261.8	24.4	1.000015
9200.0	42.3	-58.7	-58.7	68.8	570.5	261.8	27.5	1.000015
8300.0	42.1	-58.7	-58.7	68.4	570.5	261.8	30.6	1.000015
7400.0	41.9	-58.7	-58.7	68.1	570.5	261.8	33.7	1.000015
6500.0	41.7	-58.7	-58.7	67.8	570.5	261.8	36.9	1.000015
5600.0	41.5	-58.7	-58.7	67.4	570.5	261.8	40.0	1.000015
4700.0	41.3	-58.7	-58.7	67.1	570.5	261.8	43.1	1.000015
3800.0	41.1	-58.7	-58.7	66.8	570.5	261.8	44.2	1.000015

GEODETIC COORDINATES
32.89927 LAT DEG
136.40591 LONG DEG

UPPER AIR DATA
3340290173
EAST-26/CHEKRY
TABLE 8 Cont'd

STATION ALTITUDE 3912.75 FEET MSL
30 NOV. 82
ASCENSION NO. 173

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION (TN) SPEED KNOTS	INDEX OF REFRACTION
71900.0	40.9	-58.7		66.5	570.5	261.8	1.000015
72000.0	40.7	-58.7		66.1	570.5	261.8	1.000015
72100.0	40.5	-58.7		65.8	570.5	261.8	1.000015
72200.0	40.3	-58.7		65.5	570.6	261.8	1.000015
72300.0	40.1	-58.7		65.2	570.6	261.8	1.000015
72400.0	39.9	-58.7		64.9	570.6	261.8	1.000014
72500.0	39.8	-58.6		64.6	570.6	261.8	1.000014
72600.0	39.6	-58.6		64.2	570.6	261.8	1.000014
72700.0	39.4	-58.6		63.9	570.6	261.8	1.000014
72800.0	39.2	-58.6		63.6	570.6	261.8	1.000014
72900.0	39.0	-58.6		63.3	570.6	261.8	1.000014
73000.0	38.8	-58.6		63.0	570.6	261.8	1.000014
73100.0	38.6	-58.6		62.7	570.6	261.8	1.000014
73200.0	38.4	-58.5		62.4	570.8	261.6	1.000014
73300.0	38.2	-58.3		62.0	571.0	261.8	1.000014
73400.0	38.1	-58.2		61.7	571.2	261.8	1.000014
73500.0	37.9	-58.0		61.3	571.4	261.8	1.000014
73600.0	37.7	-57.9		61.0	571.6	261.8	1.000014
73700.0	37.5	-57.7		60.7	571.8	261.8	1.000014
73800.0	37.3	-57.6		60.3	572.0	261.6	1.000013
73900.0	37.2	-57.4		60.0	572.2	261.6	1.000013
74000.0	37.0	-57.3		59.7	572.4	261.2	1.000013
74100.0	36.8	-57.1		59.4	572.6	260.8	1.000013
74200.0	36.6	-57.0		59.0	572.8	260.4	1.000013
74300.0	36.5	-56.8		58.7	573.0	260.0	1.000013
74400.0	36.3	-56.7		58.4	573.2	259.7	1.000013
74500.0	36.1	-56.5		58.1	573.4	259.3	1.000013
74600.0	35.9	-56.5		57.8	573.4	258.9	1.000013
74700.0	35.8	-56.5		57.5	573.4	258.5	1.000013
74800.0	35.6	-56.6		57.3	573.3	258.1	1.000013
74900.0	35.4	-56.6		57.0	573.3	257.8	1.000013
75000.0	35.3	-56.6		56.7	573.3	257.4	1.000013
75100.0	35.1	-56.6		56.5	573.2	256.9	1.000013
75200.0	34.9	-56.7		56.2	573.2	256.5	1.000013
75300.0	34.8	-56.7		55.9	573.2	256.0	1.000012
75400.0	34.6	-56.7		55.7	573.1	255.5	1.000012
75500.0	34.4	-56.7		55.4	573.1	255.0	1.000012
75600.0	34.3	-56.8		55.2	573.1	254.5	1.000012
75700.0	34.1	-56.8		54.9	573.1	254.0	1.000012
75800.0	33.9	-56.8		54.6	573.0	253.5	1.000012

STATION ALTITUDE 3912.75 FEET MSL
 30 NOV. 82 1230 HRC MST
 ASCENSION NO. 173

UPPER AIR DATA
 3340290173
 EAST-28/CHERRY
 TABLE 8 Cont'd

GEOMETRIC COORDINATES
 32.8927 LAT DEG
 136.40591 LONG DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (IN)	SPEED KNOTS	INDEX OF REFRACTION
15900.0	33.0	-56.8		51.4	573.0	253.0	51.3	1.000012
16000.0	33.0	-56.8		51.1	573.0	252.4	50.7	1.000012
16100.0	33.3	-56.9		51.0	572.9	252.4	50.6	1.000012
16200.0	33.3	-56.9		51.0	572.9	252.3	50.6	1.000012
16300.0	33.1	-56.9		51.4	572.9	252.3	50.6	1.000012
16400.0	33.0	-56.9		51.1	572.8	252.3	50.5	1.000012
16500.0	32.8	-57.0		52.9	572.8	252.3	50.5	1.000012
16600.0	32.7	-57.0		52.6	572.8	252.2	50.5	1.000012
16700.0	32.5	-57.0		52.4	572.7	252.2	50.4	1.000012
16800.0	32.4	-57.0		52.2	572.7	252.2	50.4	1.000012
16900.0	32.2	-57.1		51.9	572.7	252.1	50.4	1.000012
17000.0	32.0	-57.1		51.7	572.7	252.1	50.3	1.000012
17100.0	31.7	-57.1		51.4	572.6	252.1	50.3	1.000011
17200.0	31.7	-57.1		51.2	572.6			1.000011
17300.0	31.5	-57.1		51.0	572.6			1.000011
17400.0	31.1	-57.2		50.7	572.5			1.000011
17500.0	31.3	-57.2		50.5	572.5			1.000011
17600.0	31.1	-57.2		50.2	572.5			1.000011
17700.0	31.0	-57.2		50.0	572.4			1.000011
17800.0	30.8	-57.3		49.8	572.4			1.000011
17900.0	30.7	-57.3		49.5	572.4			1.000011
18000.0	30.6	-57.3		49.3	572.3			1.000011
18100.0	30.4	-57.3		49.1	572.3			1.000011
18200.0	30.3	-57.4		48.9	572.3			1.000011
18300.0	30.1	-57.4		48.6	572.3			1.000011

STATION ALTITUDE 3912.75 FEET MSL
 30 NOV. 82 1230 HRS MST
 ASCENSION NO. 173

MANDATORY LEVELS
 3340290173
 EAST-28/CHEKRY
 TABLE 9

GEODETIC COORDINATES
 32.8927 LAT DEG
 136.40591 LON DEG

PRESSURE MILLIHARS	GEOPOTENTIAL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	WIND DATA	
				DIRECTION DEGREES (TN)	SPEED KNOTS
850.0	4631.	11.0	47.	210.0	14.6
800.0	6277.	6.1	60.	216.2	14.4
750.0	7997.	1.1	78.	222.0	17.0
700.0	9808.	-2.2	61.	239.8	28.5
650.0	11732.	-4.8	46.	250.3	36.7
600.0	13782.	-8.2	46.	255.1	39.0
550.0	15980.	-13.2	39.	262.2	31.8
500.0	18338.	-18.4	36.	261.9	30.7
450.0	20891.	-23.8	25.	266.5	34.3
400.0	23676.	-30.8	29.	269.8	39.3
350.0	26730.	-38.9	64.	272.7	44.9
300.0	30150.	-45.2		284.9	42.3
250.0	34099.	-50.5		284.2	52.3
200.0	38837.	-55.0		273.6	54.1
175.0	41663.	-49.2		268.5	51.2
150.0	44936.	-54.1		263.0	47.0
125.0	48739.	-58.5		251.1	52.5
100.0	53359.	-58.8		242.5	45.6
80.0	57906.	-63.4		241.4	34.0
70.0	60596.	-62.7		251.2	29.9
60.0	63726.	-61.0		249.2	16.7
50.0	67475.	-56.4		131.2	10.3
40.0	72086.	-58.7		261.8	49.5
30.0	78054.	-57.4			

STATION, ALTITUDE 4010.40 FEET MSL
30 NOV. 42
ASCENSION NO. 33

SIGNIFICANT LEVEL DATA
3340220033
NW 30
TABLE 12

GEODETTIC COORDINATES
32.08497 LAT DEG
106.49714 LONG DEG

PRESSURE GEOMETRIC MILLIBARS MSL FEET	TEMPERATURE		REL. HUM. PERCENT
	AIR DEGREES	WET BULB CENTIGRADE	
370.0	14.5	5.2	49.0
350.0	11.4	-1.0	41.0
300.7	7.4	-3.1	46.0
280.2	4.3	-4.2	53.0
240.0	1.0	-5.7	59.0
212.7	-2.0	-7.2	68.0
160.0	-3.7	-11.1	78.0
80.1	-5.1	-15.6	93.0
670.5	-5.2	-14.0	50.0
662.0	-5.0	-10.3	56.0
550.1	-6.2	-11.1	66.0
538.1	-6.2	-17.0	42.0
410.8	-7.6	-22.1	50.0
367.3	-12.3	-26.3	50.0
340.6	-12.0	-32.0	47.0
300.0	-14.4	-34.3	43.0
454.4	-24.0	-35.8	53.0
445.1	-26.1	-35.4	41.0
421.4	-26.0	-34.8	50.0
400.0	-31.8	-39.5	46.0
325.0	-43.7		
300.0	-48.0		
270.4	-50.0		
250.0	-49.5		
211.6	-53.2		
200.0	-53.7		
186.8	-51.0		
166.5	-53.9		
154.1	-51.9		
150.0	-52.6		
123.3	-60.6		
103.9	-64.0		
100.0	-63.1		
96.3	-64.0		
90.0	-59.6		
88.6	-56.3		
72.3	-63.8		
70.0	-62.3		
66.7	-63.4		
63.7	-59.0		

STATION: ALTITUDE 4010.40 FEET MSL
 30 NOV. 82 1330 HRS MST
 ASCENSION NO. 33

SIGNIFICANT LEVEL DATA
 3340220033
 HW 30

GEODETIC COORDINATES
 32.88497 LAT DEG
 106.49714 LON DEG

TABLE 10 Cont'd

PRESSURE GEOMETRIC ALTITUDE MILLIBARS MSL FEET	TEMPERATURE		REL. HUM. PERCENT
	AIR DEGREES	DEWPOINT CENTIGRADE	
50.0 67609.8	-58.8		
43.5 70490.7	-60.0		
36.3 74255.2	-56.5		

UPPER AIR DATA
 3300220033
 PW 30
 TABLE 11

STATION ALTITUDE 4010.0 FEET MSL
 20 NOV. 42
 ASCENSION NO. 33

GEOGRAPHIC COORDINATES
 32° 09' 47" LAT N
 100° 47' 14" LONG W

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CM ³	SPEED OF SOUND KI/MS	DIRECTION OF WIND (GUSTS) DEG TRUE	WIND SPEED KI/MS	INDEX OF REFRACTION
4010.4	870.6	14.5	49.0	1050.7	661.9	190.0	10.1	1.000221
4500.0	859.3	12.5	45.1	1040.8	659.3	174.5	10.2	1.000221
5000.0	848.0	10.4	42.2	1030.3	657.2	159.9	10.3	1.000221
5500.0	836.7	8.3	39.0	1020.4	655.1	145.3	10.4	1.000221
6000.0	825.4	6.0	35.7	1010.5	653.0	130.8	10.5	1.000221
6500.0	814.1	4.5	32.4	1000.6	650.9	116.3	10.6	1.000221
7000.0	802.8	3.0	29.1	990.7	648.8	101.8	10.7	1.000221
7500.0	791.5	1.5	25.8	980.8	646.7	87.3	10.8	1.000221
8000.0	780.2	0.0	22.5	970.9	644.6	72.8	10.9	1.000221
8500.0	768.9	-1.5	19.2	961.0	642.5	58.3	11.0	1.000221
9000.0	757.6	-3.0	15.9	951.1	640.4	43.8	11.1	1.000221
9500.0	746.3	-4.5	12.6	941.2	638.3	29.3	11.2	1.000221
10000.0	735.0	-6.0	9.3	931.3	636.2	14.8	11.3	1.000221
10500.0	723.7	-7.5	6.0	921.4	634.1	0.3	11.4	1.000221
11000.0	712.4	-9.0	2.7	911.5	632.0	0.0	11.5	1.000221
11500.0	701.1	-10.5	0.0	901.6	629.9	0.0	11.6	1.000221
12000.0	689.8	-12.0	0.0	891.7	627.8	0.0	11.7	1.000221
12500.0	678.5	-13.5	0.0	881.8	625.7	0.0	11.8	1.000221
13000.0	667.2	-15.0	0.0	871.9	623.6	0.0	11.9	1.000221
13500.0	655.9	-16.5	0.0	862.0	621.5	0.0	12.0	1.000221
14000.0	644.6	-18.0	0.0	852.1	619.4	0.0	12.1	1.000221
14500.0	633.3	-19.5	0.0	842.2	617.3	0.0	12.2	1.000221
15000.0	622.0	-21.0	0.0	832.3	615.2	0.0	12.3	1.000221
15500.0	610.7	-22.5	0.0	822.4	613.1	0.0	12.4	1.000221
16000.0	599.4	-24.0	0.0	812.5	611.0	0.0	12.5	1.000221
16500.0	588.1	-25.5	0.0	802.6	608.9	0.0	12.6	1.000221
17000.0	576.8	-27.0	0.0	792.7	606.8	0.0	12.7	1.000221
17500.0	565.5	-28.5	0.0	782.8	604.7	0.0	12.8	1.000221
18000.0	554.2	-30.0	0.0	772.9	602.6	0.0	12.9	1.000221
18500.0	542.9	-31.5	0.0	763.0	600.5	0.0	13.0	1.000221
19000.0	531.6	-33.0	0.0	753.1	598.4	0.0	13.1	1.000221
19500.0	520.3	-34.5	0.0	743.2	596.3	0.0	13.2	1.000221
20000.0	509.0	-36.0	0.0	733.3	594.2	0.0	13.3	1.000221
20500.0	497.7	-37.5	0.0	723.4	592.1	0.0	13.4	1.000221
21000.0	486.4	-39.0	0.0	713.5	590.0	0.0	13.5	1.000221
21500.0	475.1	-40.5	0.0	703.6	587.9	0.0	13.6	1.000221
22000.0	463.8	-42.0	0.0	693.7	585.8	0.0	13.7	1.000221
22500.0	452.5	-43.5	0.0	683.8	583.7	0.0	13.8	1.000221
23000.0	441.2	-45.0	0.0	673.9	581.6	0.0	13.9	1.000221
23500.0	429.9	-46.5	0.0	664.0	579.5	0.0	14.0	1.000221
24000.0	418.6	-48.0	0.0	654.1	577.4	0.0	14.1	1.000221
24500.0	407.3	-49.5	0.0	644.2	575.3	0.0	14.2	1.000221
25000.0	396.0	-51.0	0.0	634.3	573.2	0.0	14.3	1.000221
25500.0	384.7	-52.5	0.0	624.4	571.1	0.0	14.4	1.000221
26000.0	373.4	-54.0	0.0	614.5	569.0	0.0	14.5	1.000221
26500.0	362.1	-55.5	0.0	604.6	566.9	0.0	14.6	1.000221
27000.0	350.8	-57.0	0.0	594.7	564.8	0.0	14.7	1.000221
27500.0	339.5	-58.5	0.0	584.8	562.7	0.0	14.8	1.000221
28000.0	328.2	-60.0	0.0	574.9	560.6	0.0	14.9	1.000221
28500.0	316.9	-61.5	0.0	565.0	558.5	0.0	15.0	1.000221
29000.0	305.6	-63.0	0.0	555.1	556.4	0.0	15.1	1.000221
29500.0	294.3	-64.5	0.0	545.2	554.3	0.0	15.2	1.000221
30000.0	283.0	-66.0	0.0	535.3	552.2	0.0	15.3	1.000221
30500.0	271.7	-67.5	0.0	525.4	550.1	0.0	15.4	1.000221
31000.0	260.4	-69.0	0.0	515.5	548.0	0.0	15.5	1.000221
31500.0	249.1	-70.5	0.0	505.6	545.9	0.0	15.6	1.000221
32000.0	237.8	-72.0	0.0	495.7	543.8	0.0	15.7	1.000221
32500.0	226.5	-73.5	0.0	485.8	541.7	0.0	15.8	1.000221
33000.0	215.2	-75.0	0.0	475.9	539.6	0.0	15.9	1.000221
33500.0	203.9	-76.5	0.0	466.0	537.5	0.0	16.0	1.000221
34000.0	192.6	-78.0	0.0	456.1	535.4	0.0	16.1	1.000221
34500.0	181.3	-79.5	0.0	446.2	533.3	0.0	16.2	1.000221
35000.0	170.0	-81.0	0.0	436.3	531.2	0.0	16.3	1.000221
35500.0	158.7	-82.5	0.0	426.4	529.1	0.0	16.4	1.000221
36000.0	147.4	-84.0	0.0	416.5	527.0	0.0	16.5	1.000221
36500.0	136.1	-85.5	0.0	406.6	524.9	0.0	16.6	1.000221
37000.0	124.8	-87.0	0.0	396.7	522.8	0.0	16.7	1.000221
37500.0	113.5	-88.5	0.0	386.8	520.7	0.0	16.8	1.000221
38000.0	102.2	-90.0	0.0	376.9	518.6	0.0	16.9	1.000221
38500.0	90.9	-91.5	0.0	367.0	516.5	0.0	17.0	1.000221
39000.0	79.6	-93.0	0.0	357.1	514.4	0.0	17.1	1.000221
39500.0	68.3	-94.5	0.0	347.2	512.3	0.0	17.2	1.000221
40000.0	57.0	-96.0	0.0	337.3	510.2	0.0	17.3	1.000221
40500.0	45.7	-97.5	0.0	327.4	508.1	0.0	17.4	1.000221
41000.0	34.4	-99.0	0.0	317.5	506.0	0.0	17.5	1.000221
41500.0	23.1	-100.5	0.0	307.6	503.9	0.0	17.6	1.000221
42000.0	11.8	-102.0	0.0	297.7	501.8	0.0	17.7	1.000221
42500.0	0.5	-103.5	0.0	287.8	500.0	0.0	17.8	1.000221
43000.0	0.0	-105.0	0.0	277.9	498.1	0.0	17.9	1.000221
43500.0	0.0	-106.5	0.0	268.0	496.2	0.0	18.0	1.000221
44000.0	0.0	-108.0	0.0	258.1	494.3	0.0	18.1	1.000221
44500.0	0.0	-109.5	0.0	248.2	492.4	0.0	18.2	1.000221
45000.0	0.0	-111.0	0.0	238.3	490.5	0.0	18.3	1.000221
45500.0	0.0	-112.5	0.0	228.4	488.6	0.0	18.4	1.000221
46000.0	0.0	-114.0	0.0	218.5	486.7	0.0	18.5	1.000221
46500.0	0.0	-115.5	0.0	208.6	484.8	0.0	18.6	1.000221
47000.0	0.0	-117.0	0.0	198.7	482.9	0.0	18.7	1.000221
47500.0	0.0	-118.5	0.0	188.8	481.0	0.0	18.8	1.000221
48000.0	0.0	-120.0	0.0	178.9	479.1	0.0	18.9	1.000221
48500.0	0.0	-121.5	0.0	169.0	477.2	0.0	19.0	1.000221
49000.0	0.0	-123.0	0.0	159.1	475.3	0.0	19.1	1.000221
49500.0	0.0	-124.5	0.0	149.2	473.4	0.0	19.2	1.000221
50000.0	0.0	-126.0	0.0	139.3	471.5	0.0	19.3	1.000221
50500.0	0.0	-127.5	0.0	129.4	469.6	0.0	19.4	1.000221
51000.0	0.0	-129.0	0.0	119.5	467.7	0.0	19.5	1.000221
51500.0	0.0	-130.5	0.0	109.6	465.8	0.0	19.6	1.000221
52000.0	0.0	-132.0	0.0	99.7	463.9	0.0	19.7	1.000221
52500.0	0.0	-133.5	0.0	89.8	462.0	0.0	19.8	1.000221
53000.0	0.0	-135.0	0.0	79.9	460.1	0.0	19.9	1.000221
53500.0	0.0	-136.5	0.0	70.0	458.2	0.0	20.0	1.000221
54000.0	0.0	-138.0	0.0	60.1	456.3	0.0	20.1	1.000221
54500.0	0.0	-139.5	0.0	50.2	454.4	0.0	20.2	1.000221
55000.0	0.0	-141.0	0.0	40.3	452.5	0.0	20.3	1.000221
55500.0	0.0	-142.5	0.0	30.4	450.6	0.0	20.4	1.000221
56000.0	0.0	-144.0	0.0	20.5	448.7	0.0	20.5	1.000221
56500.0	0.0	-145.5	0.0	10.6	446.8	0.0	20.6	1.000221
57000.0	0.0	-147.0	0.0	0.7	444.9	0.0	20.7	1.000221
57500.0	0.0	-148.5	0.0	0.0	443.0	0.0	20.8	1.000221
58000.0	0.0	-150.0	0.0	0.0	441.1	0.0	20.9	1.000221
58500.0	0.0	-151.5	0.0	0.0	439.2	0.0	21.0	1.000221
59000.0	0.0	-153.0	0.0	0.0	437.3	0.0	21.1	1.000221
59500.0	0.0	-154.5	0.0	0.0	435.4	0.0	21.2	1.000221
60000.0	0.0	-156.0	0.0	0.0	433.5	0.0	21.3	1.000221
60500.0	0.0	-157.5	0.0	0.0	431.6	0.0	21.4	1.000221
61000.0	0.0	-159.0	0.0	0.0	429.7	0.0	21.5	1.000221
61500.0	0.0	-160.5	0.0	0.0	427.8	0.0	21.6	1.000221
62000.0	0.0	-162.0	0.0	0.0	425.9	0.0	21.7	1.000221
62500.0	0.0	-163.5	0.0	0.0	424.0	0.0	21.8	1.000221
63000.0	0.0	-165.0	0.0	0.0	422.1	0.0	21.9	1.000221
63500.0	0.0	-166.5	0.0	0.0	420.2	0.0	22.0	1.000221
64000.0	0.0	-168.0	0.0	0.0	418.3	0.0	22.1	1.000221
64500.0	0.0	-169.5	0.0	0.0	416.4	0.0	22.2	1.000221
65000.0	0.0	-171.0	0.0	0.0	414.5	0.0	22.3	1.000221
65500.0	0.0	-172.5	0.0	0.0	412.6	0.0	22.4	1.000221
66000.0	0.0	-174.0	0.0	0.0	410.7	0.0	22.5	1.000221
66500.0	0.0	-175.5	0.0	0.0	408.8	0.0	22.6	1.000221
67000.0	0.0	-177.0	0.0	0.0	406.9	0.0	22.7	1.000221
67500.0	0.0	-178.5	0.0	0.0	405.0	0.0	22.8	1.000221
68000.0	0.0	-180.0	0.0	0.0	403.1	0.0	22.9	

GEODLTIC COORDINATES
32.08497 LAT DEG
106.49714 LON DEG

UPPER AIR DATA
3340220033
NW 30
TABLE 11 Cont'd

STATION ALTITUDE 4010.40 FT. MSL
30 NOV. 62
1330 HRS EST
ASCENSION NO. 33

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
24000.0	394.0	-32.5	43.1**	571.6	604.4	262.9	42.6	1.000128
24500.0	380.3	-35.8	38.3**	562.1	602.8	264.8	42.6	1.000126
25000.0	377.0	-35.1	33.4**	552.8	601.2	266.7	43.0	1.000124
25500.0	369.6	-36.3	28.5**	543.7	599.5	268.4	43.9	1.000122
26000.0	361.6	-37.6	23.6**	534.7	597.9	269.2	46.3	1.000119
26500.0	353.7	-38.9	18.7**	525.9	596.3	268.9	50.5	1.000117
27000.0	340.0	-40.1	13.9**	517.2	594.7	268.6	54.3	1.000115
27500.0	330.4	-41.4	9.0**	508.7	593.1	268.4	57.5	1.000113
28000.0	331.1	-42.6	4.1**	500.3	591.5	268.2	60.7	1.000111
28500.0	323.8	-43.9		492.1	589.8	268.7	61.5	1.000110
29000.0	310.5	-45.3		483.9	588.0	269.2	61.9	1.000108
29500.0	309.3	-46.7		475.9	586.2	269.5	62.7	1.000106
30000.0	302.4	-48.1		468.1	584.4	269.6	63.8	1.000104
30500.0	295.5	-48.9		459.0	583.4	269.7	65.2	1.000102
31000.0	288.7	-49.4		449.4	582.8	269.7	67.3	1.000100
31500.0	282.1	-49.8		440.0	582.2	269.9	69.5	1.000098
32000.0	275.6	-49.9		430.2	582.0	270.8	72.0	1.000096
32500.0	269.3	-49.8		420.1	582.2	271.8	74.5	1.000094
33000.0	263.1	-49.7		410.3	582.3	273.2	76.9	1.000091
33500.0	257.1	-49.6		400.7	582.4	274.6	79.3	1.000089
34000.0	251.2	-49.5		391.3	582.6	275.2	80.3	1.000087
34500.0	245.4	-49.9		382.9	582.1	275.2	80.2	1.000085
35000.0	239.7	-50.4		375.0	581.4	275.2	80.0	1.000084
35500.0	234.2	-50.9		367.2	580.7	274.7	78.0	1.000082
36000.0	228.8	-51.5		359.5	580.0	274.0	75.2	1.000080
36500.0	223.5	-52.0		352.0	579.4	273.2	72.4	1.000078
37000.0	218.3	-52.5		344.7	578.7	272.8	69.9	1.000077
37500.0	213.3	-53.0		337.6	578.0	272.5	67.5	1.000075
38000.0	208.3	-53.3		330.2	577.6	271.9	65.6	1.000074
38500.0	203.5	-53.5		322.8	577.3	269.4	67.0	1.000072
39000.0	198.7	-53.5		315.3	577.3	267.2	69.3	1.000070
39500.0	194.1	-52.9		307.1	578.1	265.7	73.6	1.000068
40000.0	189.6	-52.3		299.1	579.0	265.1	76.0	1.000067
40500.0	185.2	-52.0		291.8	579.3	265.5	76.1	1.000065
41000.0	180.9	-52.5		285.6	578.7	265.9	76.3	1.000064
41500.0	177.7	-52.9		279.4	578.2	266.1	73.9	1.000062
42000.0	174.6	-53.3		273.4	577.7	266.1	70.0	1.000061
42500.0	168.6	-53.7		267.6	577.1	266.1	66.2	1.000060
43000.0	164.7	-53.5		261.1	577.4	265.9	62.3	1.000058
43500.0	160.8	-52.6		254.0	578.6	264.6	57.6	1.000057

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

[illegible][illegible]

22-06114 COORDINATES
22-06117 LAT LON
1985-00714 LONG LON

[illegible]

GEODETIC COORDINATES
32.88497 LAT DEG
106.49714 LON DEG

UPPER AIR DATA
3340220033
NW 30
TABLE 11 Cont'd

STATION ALTITUDE 1010.40 FEET MSL
30 NOV. 62 1330 HRS MST
ASCENSION NO. 33

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CELSIUS	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KIOTS	WIND DATA DIRECTION (TN) SPEED (TN) REFRACTION	INDEX OF REFRACTION
64000.0	59.5	-58.9		96.8	570.2	236.1	1.000022
64500.0	58.1	-58.9		94.5	570.2	232.0	1.000021
65000.0	56.7	-58.9		92.2	570.2	223.5	1.000021
65500.0	55.4	-58.9		90.0	570.3	212.0	1.000020
66000.0	54.0	-58.9		87.8	570.3	204.8	1.000020
66500.0	52.7	-58.8		85.7	570.3	195.9	1.000019
67000.0	51.5	-58.8		83.7	570.3	190.7	1.000019
67500.0	50.3	-58.8		81.7	570.4	211.2	1.000018
68000.0	49.1	-59.0		79.8	570.2	221.4	1.000018
68500.0	47.9	-59.2		78.0	569.9	230.6	1.000017
69000.0	46.8	-59.4		76.2	569.6	236.9	1.000017
69500.0	45.6	-59.6		74.4	569.3	241.1	1.000017
70000.0	44.5	-59.8		72.7	569.0	243.7	1.000016
70500.0	43.5	-60.0		71.1	568.8	246.2	1.000016
71000.0	42.4	-59.5		69.2	569.4	249.5	1.000015
71500.0	41.4	-59.1		67.4	570.0	254.4	1.000015
72000.0	40.5	-58.6		65.7	570.6	260.8	1.000015
72500.0	39.5	-58.1		64.0	571.3		1.000014
73000.0	38.6	-57.7		62.3	571.9		1.000014
73500.0	37.6	-57.2		60.7	572.5		1.000014
74000.0	36.7	-56.7		59.2	573.1		1.000013

STATION ALTITUDE 4610.00 FEET MSL
 10 NOV. 82
 1330 1805 MST
 ASSUMPTION NO. 33

MANDATORY LEVELS
 3340220033
 NW 70
 TABLE 12

GEOGRAPHIC COORDINATES
 32.80497 LAT DEG
 106.49714 LONG DEG

PRESSURE MILLIBARS	POTENTIAL FEET	TEMPERATURE		REL. HUM. PERCENT	WIND DATA	
		AIR DEGREES	DEWPOINT CENTIGRADE		DIRECTION DEGREES (TN)	SPEED KNOTS
550.0	4660.	11.8	-1.0	41.	203.0	17.0
500.0	4317.	5.6	-3.4	40.	211.2	28.6
750.0	3040.	1.4	-3.7	69.	212.0	19.2
300.0	3435.	-4.7	-5.9	68.	237.4	23.5
250.0	3116.	-5.2	-11.1	68.	240.7	40.2
400.0	3540.	-8.7	-23.1	50.	236.6	43.3
350.0	3298.	-12.0	-31.8	17.	251.7	42.3
400.0	3831.	-18.4	-34.3	23.	253.0	43.5
350.0	20405.	-25.4	-35.0	38.	282.0	43.3
400.0	23620.	-31.8	-39.5	46.	261.7	42.7
350.0	26719.	-39.5	-55.3	16.**	260.8	32.7
300.0	30119.	-49.6			269.7	54.1
250.0	34671.	-49.5			275.2	40.3
200.0	38776.	-53.7			267.7	50.0
175.0	41606.	-53.0			280.1	72.4
150.0	44369.	-52.6			359.1	45.2
125.0	46668.	-60.0			349.7	52.8
100.0	53138.	-63.1			342.4	45.7
80.0	57154.	-60.1			197.3	4.7
70.0	60461.	-62.3			239.4	14.6
60.0	63606.	-59.0			237.2	15.3
50.0	67360.	-58.8			212.9	8.4
40.0	71246.	-58.4				

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.